PROGRESS REPORT

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FOREST ADMINISTRATION

OF THE

PROVINCE OF ASSAM

FOR THE

Year 1889-90.

GUSTAV MANN, Esq.,
CONSERVATOR OF FORESTS, ASSAM.

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FROM GUSTAV MANN, ESQ.,

Conservator of Forests, Assam,

TO THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM.

Dated Shillong, the 14th July 1890.

SIR

I HAVE the honour to submit the Annual Forest Administration Report for year 1889-90.

have the honour to be,

SIR,

obedient Servant,

GUSTAV MANN,

Conservator of Forests, Assam.

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PROGRESS REPORT

OF

FOREST ADMINISTRATION IN ASSAM

For the year 1889-90.

By GUSTAV MANN,

Conservator of Forests, Assam.

INTRODUCTION.

The general progress in forest work in Assam during 1889-90 is briefly summarised as follows :—

2. The area of reserved forests added during the year under report was 25 square miles, and 87 square miles more were gazetted soon after the close of the year, besides which 49 square miles have been proposed under Section 4 of the Forest Act, and are under settlement, and the selection of other areas was continued.

3. The maintenance of the proper demarcation of boundaries of forests was carefully attended to, and nearly all of it inspected by the Divisional Forest Officers personally.

4. The survey of the Sâl forests by a party of the Imperial Forest Survey Branch was commenced in the Goálpára district, and the demarcation of the classes of forests by the officer in charge of the Working Plans Division was proceeded with in the same district, and enumerations carried out in the Ripu reserve.

A working plan for the Darugiri forest, in the Gáro Hills, was submitted for sanction.

5. The protection of the forests has been maintained in a state of efficiency. The number of cases tried in court increased by 53, the convictions came to 82 per cent: of the cases tried; but considering the large forest areas under management, the number of prosecutions which are necessary is very insignificant.

6. Fire protection has been extended to all the Sâl forests in the Province. The year was an extremely unfavourable one. A number of fires occurred, but the area successfully protected was 209 square miles more than in the previous year.

7. The Charduar Rubber-plantation was extended by 432 acres, and all the older plantations were well looked after. The growth of the trees in all is most vigorous, and the areas are fully stocked.

8. Road work consisted chiefly in repairs: about 3½ miles of new roads in reserved forests were opened out.

9. New river rules were sanctioned for the valley districts, which have greatly facilitated the control of the timber traffic.

10. The financial results of the year are a surplus of Rs. 1,22,369, which is the largest ever attained in this Province.

CHAPTER I.—AREA AND BOUNDARIES.

Area of reserved forests

11. Out of the five forests which were at the close of 1888-89 under settlement, the three following have been declared reserves under Section 19 of the Forest Act during the year :—

Name of district.	Name of mauza or other sub-division.	Name of forest.	Area.
			Acres.
Nowgong.....	Duar Jungthung	Jungthung	8,047
Ditto.....	Duar Jungthung and mauza Nomati.	Seol Dharampur	4,191
Ditto.....	Duar Bagri	Kukrakata Hill	3,936

12. These new reserves are not burdened with rights or privileges of any kind. Their boundaries and areas have been recorded in the register of reserves, and a copy of this record is given as Appendix I. of this report.

13. A small area of 21·12 acres was given up from the second addition to the Charduar reserve in the Darrang district for the villagers in the neighbourhood to graze their cattle and to supply themselves with firewood, in preference to burdening the reserve with rights.

14. In the Nowgong district an area of 50 acres was excluded from the Bamuni reserve, as this was proved to be private property in course of the land settlement carried out in that district during the year.

15. General press of work has delayed the settlement of the proposed Dibru reserve in the Lakhimpur district and the addition to the Suang reserve in the Nowgong district. The former of these, comprising an area of 87 square miles, has, however, been gazetted since the close of the year.

16. The areas of all reserves at the close of the year and the additions and exclusions during the year are shown in detail in the Tabular Statement No. 49 attached to this report.

17. On the attached map the reserved forests are shown in green and the protected forest in brown, as they were at the close of the year under report.

Area of proposed reserves under settlement.

18. The forest areas proposed as reserves remaining in course of settlement at the close of the year were the following :—

Number.	Name of forest.	Area in acres.	Name of district.	Year when proposed by Conservator.	Year when gazetted under Section IV. of the Indian Forest Act.
1	Dibru	56,189	Lakhimpur	1887-88.....	1888-89.
2	Addition to the Suang reserve..	4,688	Nowgong	1888-89.....	Ditto.
3	Ditto Barak reserve...	3,840	Cachar	1889-90.....	1889-90.
4	Second addition to the Bijni reserve.	22,540	Goálpára	Ditto	Ditto.

19. Further additions to the reserves have been selected or are being selected in nearly every district of the Province.

Area of protected forests.

20. The area of protected forests has been reduced by 2,986 acres, which were given up in the Sylhet district, partly in settlement of claims to the forests on the Raghunandan Hills, and partly for the extension of permanent cultivation.

Area of unclassed forests and waste lands.

21. The changes in the area of unclassed forests and waste lands consisted in an addition of 5,980 acres, which were part of waste land grants thrown up, and a decrease by 17,723 acres, which were taken up for permanent cultivation, and 16,174 acres, which were declared reserved forests. These changes are also shown in detail in the Tabular Statement No. 49 attached.

22. Appendix II. of this report shows in detail the boundary work done in the different divisions. Out of a total length of 1,133 miles of demarcated boundary, 1,111 miles were cleared, and 968 miles inspected by the Divisional Officers. The least proportion of inspection was done in the Lakhimpur Division. The repairs of boundary mounds extended to 4,754, out of a total number of 4,908, and the average cost of this work was Rs. 3-14-5 per mile as compared with Rs. 3-13-7 in the previous year. It decreased in all the divisions except Goálpára and the Gáro Hills, where there was an increase. The exceptionally low cost of this work in the Goálpára and Kámrúp Divisions is, as in former years, due to rewards of forest produce having been given to a large extent in those districts for the boundary work done, instead of cash payments. The number of boundary-marks for the whole Province has been slightly increased.

Boundary work

23. The boundary work in the Sylhet Division consisted in the clearing of the boundary of the land given up in the Rughunandan Hill protected forest. This being a first clearance, the average cost per mile was much higher than in the other divisions.

CHAPTER II.—Surveys, Working Plans, and Plans of Operations.

24. The survey of the Sâl forests in the Goálpára district was commenced in November 1889 by a party of the Imperial Forest Survey Branch, and the services of Mr. J C. Kelly, Sub-Assistant-Conservator, were temporarily transferred from the Assam Forest Department for this work from the beginning of December 1889 to the end of April 1890.

Surveys.

25. To further expedite the work, Mr. C. P. Fisher, Assistant-Conservator in charge of the Working Plans Division, with his subordinates and coolies, assisted for nearly two months in the clearing of survey lines and in other matters connected with it, the expenditure on which, Rs. 1,094, has been charged in the Assam Forest Accounts, and the same was done as regards an expenditure of Rs. 69 spent by the Goálpára Divisional Officer in work done for the survey party.

26. In the other forest divisions no survey work was done beyond that of some few small rectifications of boundaries either already carried out or contemplated.

27. With the exception of the two months during which the officer in charge of the Working Plans Division was assisting in the survey of the Sâl forests in the Goálpára district, he and his subordinates were engaged from the beginning of October 1889 until the middle of May 1890 in the separation of the different classes of forests in the Goálpára district, preparatory to their survey, and the enumeration of the growing stock on sample areas.

Working Plans

28. The officer in charge of the survey party at the commencement of the season hoped that he would be able to plane-table about 100 square miles of the forests, and the marking out of classes was pushed on accordingly; but it became soon evident that so much plane-tabling work could not be done. The officer in charge of the Working Plans Division was then ordered to assist in the survey work by clearing lines, but even after this had been done, the amount of plane-tabling carried out during the season has been very small, which will necessitate the re-opening of the lines defining the classes next season. This does of course not require anything like the original expenditure of time and money, still it will retard to some extent the marking out of classes in the coming season.

29. The area over which the different classes of forests were marked out was 33 square miles. It was divided into 21 sub-compartments, and 114 numbered boundary-posts were put up and 6,100 chains of line cleared. Mr. Fisher reports that more could have been done if it had not been for a fire which occurred on the area, and necessitated a re-marking of some of the class lines.

30. The forests were divided into three classes, *viz.*, pure Sâl, Sâl in mixed forests, and savannas suitable for the growth of Sâl, and the first of these was divided into three, and the second into two sub-classes. No sub-division of the third class has been attempted.

31. Enumeration was carried out on 13 sample areas, all but one of which had been selected by Mr. Fisher, and comprised the following :—

Description of forest.	Number.	Area in acres.
Pure Sâl forest, Class A	6	97·4
Ditto ditto B	2	55·8
Sâl in mixed forests, Class A	3	46·6
Ditto ditto B	2	171·7
Total	13	371·5

32. The enumerations were conducted by Forest-ranger Babu Jogendra Mohan Lahiri. No other trees than Sâl were counted, and of these but such as measured more than 3 feet in girth.

33. The number of trees counted was 4,996, and the proportion in which they were found in the different classes of forest was as follows :—

Nature of class of forest.		Total number of trees. 3 feet to 4½ feet in girth.	4½ feet to 6 feet in girth.	Over 6 feet in girth.	Average number of trees per acre.
Pure Sâl	A.....	2,819	142	10	30·5
	B.....	1,024	101	10	20·4
Sâl in mixed forests	A.....	320	69	15	8·7
	B.....	398	73	15	2·8
Total.....		4,561	385	50	

34. The total cost of marking out classes of forests, exclusive of the Divisional Officer's pay, and the cost of subordinate establishments was Rs. 1,674, or Rs. 51 per square mile, and of enumeration work Rs. 111, or Re. 0-4-8 per acre.

35. Sample areas of about half an acre each were selected in the Guma and Sidli reserves in the Goálpára Division, in the Barduar, Pantan, and Kulsi reserves in the Kámrúp Division, in the Balipara reserve in the Darrang Division, and in the Diju, Suang, and Deboka reserves in the Nowgong Division, and all the Sâl-trees on them numbered and measured with a view of forming an accurate record of the rate of growth of Sâl-trees in this Province.

Annual plans of operation

36. The annual plans of operation for each division were, as usual, submitted by the different Divisional Officers through the respective Deputy-Commissioners, and the works ordered by the Conservator were carried out.

CHAPTER III.—Protection and Improvement.

Establishments.

37. The increased areas of reserved forests and greater activity in the timber trade have made some increase in the temporary establishments necessary, but the utmost economy is constantly practised in every way so as to cause no expenditure on this account that can possibly be avoided. The general conditions under which forest conservancy is carried out in this Province are favourable in this respect ; but, on the other hand, there is no doubt whatsoever that all the protective establishments kept up hitherto as temporary, are required permanently for the efficient management of the forests, and proposals to this effect have accordingly been submitted to the Chief Commissioner, and are now under consideration.

General protection against breaches of Forest Law

38. As a rule, the protection from a purely forest point of view is perfect, and could not be better. Excepting a trifling case in the Gáro Hills, no encroachments of any kind have occurred on the large forest areas under management, and the small number of ordinary forest offences committed, considering the extent of the forests, is a further proof that the protection has been effective. With the sole exception of fires lit in or near the forests, cases of undiscovered breaches of forest rules are hardly ever heard of.

39. The Statement No. 50 attached to this report shows the breaches of forest rules according to districts. The total number of cases was 169, or 61 more than in the previous year, 155 of them were disposed of during the year, and out of these 127 cases were convictions and 28 acquittals. Two-thirds of the increase above stated took place in the Sylhet district, where the unsettled state of the protected forests is the chief cause of people trying to obtain forest produce without licenses, but the Divisional Officer is confident that this will not be repeated to the same extent, since out of 83 cases 79 convictions were obtained. In the Nowgong district there has been a considerable decrease in the number of cases, whilst in the Sibságar district there has been a large increase, the former is ascribed by the Divisional Officer to the people having become better acquainted with the forest laws, and because they can have all they require by asking for it. The increase in the Sibságar district is reported by the Divisional Officer to be due to the fact that the power to compound offences under Section 67 of the Forest Act was restricted to forest-rangers, which has reduced the number of offences compounded in that district to about one-fifth of what it had been in 1888-89. In the Cachar district, on the contrary, all cases, 23 in number, were compounded, and none taken into court.

40. In the following table a comparison is made as regards offences compounded with the previous year in all the districts, which shows also a decrease in the total number of cases. The former practice of allowing offences to be compounded by foresters was very convenient, and did no harm, because nearly all the offences so dealt with were trivial. Under the amendment of the Forest Act of 1878, Act V. of 1890, the Divisional Officers only will compound forest offences, since there are no rangers drawing as high pay as Rs. 100 per mensem:—

Name of district.	Number of cases.		Number of persons.		Amount.	
	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.
					Rs.	Rs.
Cachar	14	23	18	25	76	164
Sylhet	39	68	39	68	133	155
Goálpára	7	10	29	17	446	208
Kámrúp	22	39	44	65	87	303
Darrang	46	7	56	7	106	31
Nowgong	90	51	124	55	680	252
Sibságar	109	20	123	20	774	66
Lakhimpur	56	27	56	33	1,048	976
Gáro Hills	7	43	14	48	178	192
Total	390	288	503	338	3,528	2,317

41. The amount shown in the above table as realized gives an average of Rs. 9-0-9 per case in 1888-89 and of Rs. 8-2-5 per case in 1889-90.

Forest fires

42. As regards fire protection, the season under report was a most unfavourable one, more so than has been experienced for the last twenty years. There was very little winter rain, and consequently everything became as dry as tinder by the time the high winds which prevail in spring commenced, and in many instances the slightest carelessness has resulted in a conflagration, which it became afterwards extremely difficult to put a stop to; but almost as much mischief has been done by incendiarism, which in two districts was so determined that the forest officials, with every possible assistance from the people in the neighbourhood, were unable to get the better of the fires. In one of these the culprit was caught, prosecuted, and sentenced to five years' imprisonment, but in the other case, that of the Khási Hills, all efforts to discover the offender have failed; although the Deputy-Commissioner offered a reward of Rs. 200, nothing has so far been found out.

43. The issue of the Chief Commissioner's Circular No. 32, dated the 6th of May 1889, calling the attention of Deputy-Commissioners to the provisions of Section 25 (*b*) of the Forest Act, and instructing them to bring the same to the notice of proprietors and holders of land, and to point out that there are practically no cases in which during the dry season a forest connected directly or by other forest land with a reserved forest can be fired without endangering the safety of the reserved forest, has put people generally on the alert, and made them take an interest in the prevention of, or the spreading of fires, and has thus done a great deal of good. The issue of rules under Section 25 (*b*) of the Forest Act, with a view to a more efficient protection of the forest against fire, is also under consideration.

44. Rules under Section 25, clause (*i*) of the Indian Forest Act, forbidding hunting, shooting or fishing in Government reserved forests without licenses, and prohibiting it altogether in the districts where there is danger from fire, during the months of March to May, have also received the sanction of the Chief Commissioner, and greatly facilitated fire protection. All this is quite indispensable, since the difficulties of this work are extreme, and its cost will always be large in proportion to the greater or less stringency with which the law respecting forest fires is enforced or not.

45 The protection of many of the forests was attempted in the year under report for the first time, and in these cases want of local knowledge has, no doubt, to some extent been the cause of the failures which took place, particularly in the Goálpára Division, where nearly all the newly-attempted areas were burned in spite of the long experience which Mr. Mein has had in this work.

These fires on the areas attempted for the first time have made the percentage of failures as compared with the areas attempted very high in the year, as shown in the following table:—

Name of division.	Percentage of failures to area attempted.						
	1883-84.	1884-85	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.
Goálpára	64·32	2·51	·85	2·27	·63	6·89	56·67
Kámrúp	11·09	10·09	6·24	·18	01	·76	3·73
Darrang	·16	1 69	.....	.....	16·87	.....	16·50
Nowgong	·35	·17	3·08	·53	1·04	1·48	·70
Khási Hills ...	·41	·63	.....	3·49	.....	3·58	18·89
Gáro	.....	.....	.....	.....	1·11	.....	·75

46. On the other hand, the area attempted to be protected was 676,869 acres, or 360,886 acres more than in the previous year, and the area successfully protected was 133,782 acres more than in the previous year, which is a distinct advance, at a comparatively small increase of expenditure.

47. The total cost of fire protection in the year has been Rs. 12,368, or Rs. 18 per square mile successfully protected, which is the same rate per square mile as it was in 1888-89.

48. The total area of reserved forests at the close of the year was 3,473 square miles, out of which 2,284 square miles are evergreen, and do not require fire protection. The remaining 1,189 square miles have now been all included in this work.

49. The differences between the total area attempted to be protected as shown in Statement No. 51, and the total area of each reserve as shown in Statement No. 49, is accounted for by the areas cleared for fire-lines, grass lands burned off or cultivated for the sake of protection against fire, or by intervening patches of evergreen forest, which do not require fire protection.

50. In addition to the reserves, there are 2 square miles of protected forests in the Kámrúp Division, and 7 square miles of unclassed State forests in the Khási Hills under fire protection.

51. Besides the above, there have been 35 square miles more protected against fire in other districts, which are at present unclassed State forests, but which it is intended to make into reserves immediately.

52. The following table will show the progress made and the failures which occurred in this work during the year in the different divisions:—

Name of division	Increase in expenditure as compared with previous year.	Decrease in expenditure as compared with previous year.	Increase in area attempted to be protected in acres.	Increase in area actually protected in acres	Decrease in area actually protected in acres
Goálpára	.....	161	241,527	20,888	.....
Kámrúp	231	.....	6.666	4,454	.....
Darrang	.....	21	.....	.....	3,060
Nowgong.....	393	.. ...	34,250	34,400	.....
Khasi and Jaintia Hills.	655	.....	.....	.....	701
Gáro Hills	2,127	.....	78,443	77,801	.....
Total.....	3,706	182	360,886	137,543	3,761

53. The tabular Statement No. 51 attached to this report exhibits the results of this year's fire protection works in full detail and the map-record showing the areas burned and the tabular statements showing the degree of damage done, are kept up properly in the Conservator's office and the offices of the respective divisions.

54. The average cost per square mile of fire protection in the different divisions has been as follows:—

Name of district.	Of area attempted.			Of area successfully protected.		
	Rs.	As.	P.	Rs.	As.	P.
Goálpára	6	11	9	15	8	7
Kámrúp	24	14	4	25	13	9
Darrang	10	11	0	12	13	0
Nowgong	7	13	9	7	14	8
Khási and Jaintia Hills	177	6	0	218	11	9
Garo Hills	19	7	5	19	9	9

55. The very high cost of this work in the Khási Hills is due to the nature of the forests, which are Pine, and the proximity of the station of Shillong, both of which necessitate much more expensive measures of protection in the way of more numerous and better kept fire-lines than are required elsewhere, also to the employment of more fire-guards when incendiarism became very bad.

56. The low cost of it in the Nowgong Division is accounted for by compensation for work done having been given in many instances in the shape of free grants of forest produce instead of in cash payments.

Account of fire protection according to divisions.

57. Further details respecting the work of fire protection according to divisions are as follows.

Goálpára Division

58. The forests in the Goálpára Division are at once the most extensive and the most valuable of all the forests protected against fire. The season was here, as everywhere, an exceptionally dry one, no rain had fallen for over five months, and the hot winds in March are reported to have been worse than usual, still, with the exception of the Bengtol-Darogaon reserve, which was burned by an incendiary, there were no serious forest fires until the 10th of March, and had the rain, which generally falls in this district by the beginning of March, not kept off, we should probably have had a successful season, but everything was so terribly inflammable then, that burning stuff was blown across from the Bengal or western bank of the Sankos river. It first lighted the grass on an island in that river, and from there blew into the Sankos reserve in the Goálpára district, from whence it spread with great rapidity eastwards up to the Champamoti river, burning the Sankos, Ripu, and Chirang reserves, the protection of which had been attempted this year for the first time, and it was only by the utmost exertion on the part of the Divisional Officer, his subordinates, and a great number of the villagers from the neighbourhood, that the fire was kept out of the Sidli reserve, which has been successfully protected for the last 14 years.

59. The burning of portions of the Panbari-Pechadaveri, and the Charaidaka reserves was part of this fire.

60. The burning of the Bengtol and Darogaon reserve by an incendiary, as above referred to, nothing could have prevented, because the man was bent on doing mischief and desperate at the time, so that no one, neither the forest guards present nor the man's own relatives, who were looking on, ventured to stop him by force. He has done much harm in other respects in the neighbourhood, and although not mad exactly, he would undoubtedly be best provided for in a lock-up, he was tried, found guilty, and sentenced to five years' imprisonment under the provisions of the Indian Penal Code, and the people in that part of the country where he was living are glad to have got rid of him for the time being.

61. The fire in the Guma reserve, which burned about half of it, originated in the reckless burning of grass by a herdsman not far from the boundary of this reserve. The fire was blown by the strong wind across the Bownai river and the evergreen forests on its bank, and lighted the reserve in three different places at once The culprit was prosecuted, and sentenced to six months' imprisonment under Section 25(*b*) of the Indian Forest Act.

62. A shooting-party, the guests of the Mahárája of Cooch Behar, entered the Government reserves in spite of the orders closing them in the fire season, which had been published and were handed to them. This has been reported to the Chief Commissioner, and steps have been taken to prevent a recurrence in the future.

Kámrúp Division

63. In the Kámrúp Division the forests which need protection against fire are also very valuable, but the area is much less than in Goálpára. Fire conservancy commenced in 1873-74, and has been continued ever since. There were four fires altogether in this division during the year, two of which (those which occurred in the Chhaygaon and Taraibári reserves) were small and soon extinguished, not burning more than 60 acres in either ; but the other two, which occurred in the Rani reserve, one in the Myang block and the other in the Mairakanda block, were much more serious; in the first of these 2,000 acres were burned before the fire could be got under, and the Divisional Officer has not been able to discover the origin of this fire. The second one burned 600 acres ; it was lit by the hill people on their return from the Rani market, but no arrests were made in this case either, and the offenders escaped, which is much to be regretted. Fortunately, the undergrowth on both these areas burned was so light that comparatively little harm was done. The area under fire-protection in the Kámrúp Division comprised all the *Sâl* forests, but only

6,666 acres in excess have been entered as attempted, the rest, or 10,122 acres, being grass lands which have hitherto been burned off to insure the safety of the areas covered with trees. This practice will be discontinued in future, and grass-lands, as well as those on which trees already grow, be protected against fire.

64. The leasing for cultivation of grass-lands as an extra precaution in the way of fire-strips was continued where advantageous, but the terrible mortality amongst the people from *kála-azár* has in this respect interfered with fire-protection in the Kámrúp Division and also made it slightly more expensive.

Darrang Division

65. In the Darrang division the protection of the Balipara and Gorumari Sâl forests and the Charduar and Bamuni Hill rubber plantations was successful; but of the Khair forest in the Khalingduar reserve 3,060 acres were burned by the Hati-Mati-Khoa Bhutias, who are believed to have set fire to this reserve maliciously. The culprits were not caught, and the matter is still under investigation by the Deputy-Commissioner of the district.

Nowgong Division

66. In the Nowgong Division fire protection was extended to all the reserves, which, excepting grass-lands without trees burned off for the protection of the areas covered with trees, comprised 132 square miles, and was successful, with the exception of 590 acres, which were burned in the Sonaikusi reserve. This fire was lit in the middle of the day, when the wind was blowing very strong, by a dâk-runner of the Postal Department, which accounts for so much having been burned, although the fire was noticed at once by the guards. The offender was apprehended, prosecuted, and sentenced to six months' imprisonment, and a fine of Rs. 50.

Gáro Hills Division

67. In the Gáro Hills Division fire protection was this year extended to all the reserves comprising a total area of 85,255 acres, and has been very successful, with the trifling exception of 642 acres. This satisfactory result was to a great extent due to the interest taken in the work by the Deputy-Commissioner of the district, and expenditure on this work has also been kept within proper limits, in consequence of its having been done by Gáros instead of by imported labour, which could not have been accomplished without the good-will of the Deputy-Commissioner. The difficulties of fire protection, which under ordinary circumstances would be very great in Gáro Hills, are lessened by the knowledge which the Gáros have of it, and the appreciation of it by them, as they have always to a large extent protected the jungle growth on their own lands, with a view of securing a larger quantity of ashes for their new *jhúms*.

68. The external fire-lines measured 153 miles in length, and were cleared to an average width of 300 feet.

69. The only large fire occurred in the Songsac reserve, and burned about 600 acres; it originated in the burning of a *jhúm* about a mile distant from the reserve. The offender was brought up before the Deputy-Commissioner, but let off with a warning, as he had taken some precaution to prevent the spreading of the fire from his *jhúm*, which, however, proved of no avail.

70. The fire in the Dibru reserve, which burned 37 acres, is believed to have been lighted by people hunting and shooting outside the reserve. It crossed the Gagua river, and thus burnt part of the reserve before it could be got under.

71. The offence of setting fire to the Dambu reserve, which burned 3 acres, was compounded by the Divisional Officer, the men being made to pay Rs. 5 each, as there had been carelessness on their part.

72. The fire in the Rewak reserve, which burned 2 acres, is supposed to have originated with the khedda people, but no one was caught.

Khási and Jaintia Hills Division

73. The forests in the Khási Hills regularly protected against fire are those on the Shillong estate, the Riatkhwan, a few miles out of Shillong, on both sides of the main cart-road, and those areas outside the Shillong estate, which were taken up with a view of securing a water-supply for the station.

74. With the exception of two acres, which burned in the Riatkhwan reserve and which it is suspected the forest guard in charge lit to mislead the police, all the fires took place on the Shillong estate. There were altogether eight different fires lit by incendiaries, three of which were lighted at the same time in the same part of the forest, but yet too far apart to have been done by one and the same person, so there must have been accomplices, or special contrivances been resorted to. At the fire in the Riatkhwan a piece of hollow bamboo with old rags in, partly burned, was found, and it is suspected that the fires in other places were lit in a similar way. There is no doubt that the fires were lit

by incendiaries since in all cases they originated in the forest at some distances from the public roads, where no person would go except for the purpose of doing mischief. It is supposed to have been done out of malice, to get the present forester in charge of this area, who is very attentive to his work, into trouble, but nothing has been discovered up to date, although the Deputy-Commissioner offered a reward of Rs. 200.

75. In these cases, also, most of the trees were sufficiently large not to be killed or permanently injured by these fires, still in some localities much harm has been done to the young trees.

76. Ready assistance was given by the military and police authorities, as well as by the villagers in the neighbourhood, in extinguishing the different fires. The safety strips answered perfectly in confining the fires to the blocks in which they had been lighted.

Natural reproduction

77. Natural reproduction in the Assam forest is all that could be desired. The aim in lower Assam has always been, and is now, to assist the spreading of Sâl, as this is by far the most valuable tree in the Assam forests, and there is very little doubt that for buildings and bridges, Sâl will eventually be used almost exclusively in the valley districts, in preference to the other first-class timbers.

78. The natural regeneration of other trees is also well ensured at present, because the demand for them is exceedingly small. When the latter increases, this will require the special attention of forest officers. Sisu and Khair form a class of forest by themselves. They will spread very readily under fire-protection. They are also sufficiently valuable to have their areas increased by sowings, which can be made without great expense.

Artificial reproduction

79. The extensions of plantations during the year were 12 acres of Khair (*Acacia Catechu*) in the Kámrúp Division, 432 acres of Rubber (*Ficus elastica*) in the Darrang Division, and 20 acres of Ajhar (*Lagerstrœmia Reginæ*) in the Sibságar Division. Full details are given about this and the condition of the existing plantations in Statement No. 52 and Appendices III. and IV. of this report. The growth in all of the plantations is everything that could be desired, and most vigorous. The total expenditure on plantation work during the year was Rs. 10,623.

80. The necessary clearing, weeding, and climber-cutting has been carried on in all the plantations of former years. In the older portions nothing more than protection is needed, as the areas are fully stocked, and the trees have grown so vigorous that they keep themselves clear.

81. An attempt was made both in the Kámrúp and Darrang Divisions to assist the lateral development of the Rubber-trees, as suggested by the Inspector-General of Forests at his visit last year, by tying down side branches to the ground, but the dense foliage overhead not admitting sufficient light for the growth of these branches, this was not successful. The development of the Rubber-trees, in consequence of throwing out new aërial roots from the stem and upper branches, is, however, so great that the fact of the tied down branches not having succeeded will not matter. The lateral growth of the trees is already such that many of them have to be removed. This latter work was begun in the year under report in the Charduar Plantation, by tapping suppressed trees to death. The yield of Rubber from these trees was, as had to be expected, very small, for the simple reason that their growth had already been much retarded and stunted by their stronger neighbours.

82. The exceptional draught in March prevented the planting on the new extension of the Charduar Rubber Plantation to be completed, but this is being done now.

83. The small Bamuni Hill Rubber Plantation, near Tezpur, was, as in former years, protected against fire, nothing more being necessary now that the trees have grown large, and keep down all undergrowth.

84. The sowings of Sâl in the Dambu Forest have been a failure. The seedlings are reported to have come up in great profusion, and to have been strong and vigorous, but most of them were afterwards bitten off by crickets, and the field-rats are said to have completed the work of destruction by eating up the roots. The Divisional Officer, Mr. Campbell, hopes to overcome these difficulties in future. The expenditure on these sowings during the year was Rs. 71.

85. The nursery of Makai (*Shorea assamica*) in the Lakhimpur Division, which had been made in the Makum forest, has not succeeded any better, Mr. Jellicoe reports that seven beds, measuring 66 feet in length by 6 feet in width, were sown, but that the greater portion of the seed has been destroyed by birds. The expenditure on this work was Rs. 50.

86. Frequent personal supervision from the Divisional Forest Officer is the best and only cure against rats, crickets, and birds; without this no nursery work or planting will ever succeed in Assam.

87. The Teak-trees on the two acres sown experimentally in summer 1869 near the old Makum Fort are reported to be doing well, and to require no further attention. They were measured as usual, and the largest of the trees was found to be 3 feet 11½ inches in girth.

Sowing and planting on *jhumed* lands

88. The efforts made in former years to induce people who practise *jhúm* cultivation to sow timber-trees on their fields, have been continued These people have shown hitherto the greatest possible aversion to incurring responsibility about the success of such sowings and plantings, or to being supervised in any way in the work they do on their fields, but these feelings are beginning to wear off, and some of them have agreed to make trials. All this is quite natural, success can only be gradual in this respect. The area available for *jhúming* is already much restricted by the extension of permanent cultivation and the making of reserves, which will be an inducement for *jhúming* people to agree to making clearances in reserves and to planting them. This is especially the case in the Cachar and Sylhet districts. In the former some Kuki and Cachari families have been induced to commence cultivation in several of the reserves, on the condition that they will plant and sow timber-trees on their fields, and in the Sylhet Division 20 houses of Tipperas were established within the reserve limits, but in both districts the sudden impressment of men for the Lushai Expedition limited the labour of these people to such an extent that no sowing of timber-trees could be attempted by them this year.

89. For the purpose of teaching the people, 2 acres were sown in the Sylhet Division with Nagessur, and the counting of the seedlings at the close of the year showed 1,947 plants alive.

90. In the Kámrúp Division 132 acres were sown, but the Divisional Officer, Mr Copeland, reports that the terrible mortality amongst the people from *kála-azár* makes it very doubtful that any part of this area will be a success ; and in the Gáro Hills Division 6 acres were sown in the Rája Simla reserve, and another two fields tried in the Ildeck reserve, but they were both failures.

91. In the Darrang Division " Miris" sowed an acre of land with Sâl in the Balipara reserve without payment, as they had been allowed to cultivate some other land without trees on it within the limits of that reserve ; and in the Nowgong Division Sâl was sown on 4½ acres in the Kholahat reserve by the manager of an adjoining tea-estate, because he was permitted to cut firewood on that area, and 30 acres were got ready for sowing in the Deboka reserve by the Divisional Officer, by clearing lines, 6 feet in width and 40 feet apart, at a cost of Rs. 62-8 to teach the people, as he had failed to persuade them doing this work on their fields.

92 All this is preparatory, to make the people accustomed to this system, which no doubt will succeed in time. It requires patient teaching, which must be persevered in by Forest Officers, no matter what difficulties there may be they have to overcome, since there are very large areas in our reserved forests which are inferior, or bare of trees, and regular plantations on a large scale are quite out of the question, on account of their great cost, except in special cases, such as that of the Rubber plantations.

93. The as yet great uncertainty about the success of this work of *arbori jhúm* cultivation is the reason that none of the areas in question have been entered in the Statement No. 52 of this report.

Improvement fellings

94. The removal of badly-shaped trees from the Sâl forests in the Goálpára and Kámrúp Divisions was continued during the year, and every encouragement given to purchasers to buy them. In the Goálpara Division, as many as 949 trees, giving 15,379 cubic feet, were worked out, whilst in the Kámrúp Division only 100 trees were felled and cut into 190 logs. Purchasers have not come forward so readily as in the previous year to take these trees. In future, it is intended to do this work by direct departmental agency.

Cutting of climbers.

95. Climber-cutting was carried on in the Guma, Panbari-Pechadaveri, Bengtol, and Darogaon reserves of the Goálpára Division over an area of 13,526 acres at a total cost of Rs. 525-12, or an average cost of Rs. 24-14 per square mile; in the Kámrúp Division on 1,608 acres, in the Pantan, Kulsi, and Chhaygaon reserves at a total cost of Rs. 133-1-6, or an average of Rs. 52-14-11 per square mile; and in the Nowgong Division on 14,007 acres in all the reserves except "Sonaikusi," at a total cost of Rs. 461, or Rs. 21-1 per square mile.

Communications and buildings.

96. The only new road constructed during the year was one 3½ miles in length in the Charduar Rubber Plantation, connecting the Balipara-Belsiri road with the South Charduar road, at a cost of Rs. 410-14. It runs due north and south through the new extension of the Charduar Rubber Plantation, and forms a compartment line.

97. The rest of the roadwork done by the department during the year consisted in repairs of old roads and paths in the forests or leading to them, which are very numerous and extensive. The necessity for having them varies much in the different forest divisions according to the localities in which the forests are situated, and the configuration of the ground, which explains the great difference in the amounts spent on this work in the different divisions. This expenditure during the year under report has been as follows:—

	Rs.	A.	P.
Cachar Division	289	7	8
Goálpára „	20	14	0
Kámrúp „	1,023	14	10
Darrang „	1,449	4	0
Sibságar „	474	2	9
Lakhimpur „	116	3	0
Khási and Jaintia Hills	200	0	0
Gáro Hills „	177	15	5
Total	3,751	13	8

98. The building work done by the Department consisted also chiefly in repairs, but a new inspection bungalow was constructed at Margherita near the Upper Dehing reserve in the Lakhimpur Division, and another one was begun in the Dambu reserve in the Gáro Hills Division, whilst material for the construction of a new forest office in the station of Sylhet was got ready, besides which the Divisional Officer's bungalow at Dhubri, in the Goálpára Division, was altered and improved, and all other buildings belonging to the department thoroughly repaired where necessary, and numerous temporary huts put up in or near the forests to provide shelter for the subordinates on the executive and protective establishments, which is particularly necessary in this Province, because tents cannot be used much in the dry season, and not at all in the rains, as they rot so fast.

99. The total expenditure on building work has been during the year Rs. 15,944-13-11, as compared with Rs. 11,033-4-11 in 1888-89. The proportion in which this expenditure was incurred in the different forest divisions was as follows:—

	Rs.	As.	P
Cachar Division	1,161	9	0
Sylhet „	1,798	14	6
Goálpára „	3,713	10	0
Kámrúp „	1,295	1	11
Darrang „	666	9	3
Nowgong „	391	4	6
Sibságar „	1,182	9	3
Lakhimpur „	3,773	13	9
Khási and Jaintia Hills Division	58	1	9
Gáro Hills	1,603	4	0
Total	15,944	13	11

CHAPTER IV.—YIELD AND WORKING.

Total outturn.

100. The tabular Statement No. 54 attached to this report shows the total outturn of timber, other descriptions of wood and fuel from all the Governments forests during the year.

101. The following is an abstract of that statement giving the totals of the year under report and for the previous year, according to the class of forests, for ready comparison:—

Class of forest.	1888-89						1889-90.					
	Timber in the rough, logs	Timber in the rough, poles	Sawn or squared timber.	Miscellaneous.	Fuel.	Total.	Timber in the rough, logs.	Timber in the rough, poles.	Sawn or squared timber.	Miscellaneous.	Fuel.	Total.
From reserved forests.	755,168	18,844	621	83,462	1,010,669	1,868,759	1,058,422	30,518	1,946	17,147	311,276	1,419,309
From protected forests	9,435	676	14,837	600	416,412	441,960	11,676	18,224	122	9,450	505,274	544,746
From unclassed forests	1,081,150	21,022	7,094	149,820	1,958,238	3,217,324	1,224,718	31,782	3,181	135,452	1,658,439	3,053,572
Total	1,845,748	40,542	22,552	233,882	3,385,319	5,528,043	2,294,816	80,524	5,249	162,049	2,474,989	5,017,627

102. The agency of exploitation, *i.e.*, how far the produce was worked out by Government, by purchasers, or consisted of free grants during the year under report, and for the previous year, is shown for ready comparison in the following abstract:—

Agency of exploitation.	1888 89						1889-90.					
	Timber in the rough, logs.	Timber in the rough, poles.	Sawn or squared timber.	Miscellaneous	Fuel.	Total.	Timber in the rough, logs.	Timber in the rough, poles.	Sawn or squared timber.	Miscellaneous.	Fuel.	Total.
By Government agency	3,822	711	...	1,166	.....	5,699	8,931	1,912	...	704	.....	11,547
By purchasers	1,101,020	24,059	3,344	193,213	159,879	1,481,515	1,361,128	23,582	5,249	155,071	194,509	1,739,539
„ free grants.	740,906	15,772	19,208	39,503	3,225,440	4,040,829	924,757	55,030	...	6,274	2,280,480	3,266,541
Total	1,845,748	40,542	22,552	233,882	3,385,319	5,528,043	2,294,816	80,524	5,249	162,049	2,474,989	5,017,627

103. The total outturn, as shown in the above two tables, is 510,416 cubic feet less in the year under report than it was in 1888-89. This decrease is, however, less than the decrease in fuel removed free by ryots, and therefore only nominal.

104. On the other hand, the outturn of logs and poles, the greater part of which is removed for purposes of trade, is considerably larger than in 1888-89.

105. The outturn from reserved forests was 449,450 cubic feet less than in the previous year, which is also accounted for by less fuel granted free in those forests, and the increase of outturn from the protected forests as compared with the previous year is similarly due mainly to an increased quantity of fuel granted free from these forests in the Sylhet district.

106. The outturn from the unclassed forests is 163,752 cubic feet less than in the previous year, and entirely owing to the decrease in fuel removed free by ryots in the valley districts.

107. The outturn of timber removed by Government agency was 5,848 cubic feet more, and that by purchasers 258,024 cubic feet more than in the previous year, whilst free grants came to 774,288 cubic feet less than in 1888-89.

108. The outturn of Sal timber, which is the most important from a revenue point of view, was 506,849 cubic feet, as compared with 433,955 in 1888-89, or an increase of 72,894.

109. These variations of outturn will be further explained below.

110. The following is a comparison of the outturn from shared forests with that of the previous year:—

	1888-89.			1889 90.		
	Number of trees.	Pieces of dead wood.	Cubic feet.	Number of trees.	Pieces of dead wood.	Cubic feet.
From zemindári forests in the Gáro Hills.	594	.....	23,760	601	.. ...	24,040
From the forests in the Khási Hills.	287	2,982	41,300	412	1,789	34,370

This cubic contents has been entered at an average of 40 cubic feet per tree and 10 cubic feet per piece of dead wood.

111. The above is a slight increase in the outturn from shared forests, which is due to the greater activity in the export timber trade generally in Lower Assam. The outturn of foreign and private forests is not registered in the Assam valley districts.

112. The conditions under which the timber trade in Cachar and Sylhet is carried on, as described in paragraphs 131 and 132 of last year's report, remain unchanged.

113. In the following abstract statement a comparison is made between the outturn of timber and fuel in cubic feet from Government forests, including free grants, foreign, and private forests in the Surma Valley districts in the last two years:—

Class of forest.	1888-89.		1889-90.		Increase.		Decrease.	
	Timber	Fuel.	Timber	Fuel.	Timber.	Fuel	Timber.	Fuel.
CACHAR.								
From Government forests...	227,104	33,720	381,718	64,190	154,614	30,470	.....	.....
„ foreign „ ...	58,853	16	51,790	218	.....	202	7,063	.....
„ private „ ...	143,951	31,390	220,426	6,632	76,475	.....	.....	24,758
SYLHET.								
From Government forests...	75,311	542,848	68,909	697,490	.....	154,642	6,402	.....
„ foreign „ ...	156,870	5,302	183,201	3,906	26,331	.....	.....	1,396
„ private „ ...	19,196	436	13,020	382	.....	.....	6,176	54

114. The above shows that in Cachar 58·37 per cent. of the timber came from Government forests, 7·92 per cent. from foreign forests, and 33·71 per cent. from private forests, whilst in Sylhet 25·99 per cent. came from Government, 69·10 per cent. from foreign, and 4·91 per cent. from private forests.

115. The increase in the outturn of timber from Government forests in Cachar is ascribed by the Divisional Officer to the stock of former years held by timber traders having become more or less exhausted, and the consequent necessity of obtaining fresh supplies. The decrease in the outturn of timber from Government forests in Sylhet is due to the closing of the Langai and Singla reserve on account of the Lushai Expedition.

116. The increase in the outturn of fuel from Government forests in the Cachar and Sylhet Division is due to people having availed themselves to a much greater extent than in previous years of the free home consumption permits allowed to all ryots.

117. Foreign timber is imported into Cachar from Manipur and Lushai-land. The military operations in the latter country were the cause of the decrease in the cubic contents of the timber from foreign forests imported into Cachar. The outturn of timber from the Hill Tipperah foreign forests imported into Sylhet, has on the contrary much increased, the reason for which, the Sylhet Divisional Forest Officer reports, is the lowering of the timber-tax in Hill Tipperah.

118. The increase in the outturn of fuel from foreign forests in Cachar is insignificant, and requires no notice, and the same is the case with the small decrease in the outturn of fuel from foreign forests in Sylhet.

119. The increase in the outturn of timber from private forests in Cachar, where they are of considerable extent, is due to the general increase in the demand, whilst the decrease in outturn from the private forests in Sylhet is reported to be due to the exhausted state of those forests and the fact that the owners of them are husbanding their timber stock more.

120. The decrease in the outturn of fuel from private forests, both in Cachar and Sylhet, is accounted for by the people in these districts having supplied themselves with fuel to a much greater extent than formerly by means of free home consumption permits from Government forests.

THE WORKING OF THE FORESTS.

Departmental operations.

121. Timber operations by direct departmental agency were resumed on a small scale in the way of experiment in the Goálpára Division. 253 Sâl-trees were felled, out of which 238 were cut into 456 logs, containing 8,484 cubic feet of timber in the rough, which was sold for Rs. 7,100, or an average of annas 13 pie 4·6 per cubic foot.

122. The cost of felling and removal to sale depôt, including all expenses, and making a liberal allowance for cost of supervision, came to about Rs. 13 per tree; if to this the royalty of Rs. 10 per tree charged at present is added, it makes the total cost in the sale depôt Rs. 23 per tree, whilst the money realized came to Rs. 30, or Rs. 7 more than we realize on the trees sold to purchasers. This is more than sufficient to justify all timber works being carried on by direct departmental agency in future, for, even if Rs. 2 more are allowed per tree for deterioration of live stock and dragging gear, it still would increase the revenue from this source to half as much again as what it is at present.

123. In the Gáro Hills nothing more than the carting of sleepers to depôt and the sawing of a small quantity of timber was attempted by direct departmental agency during the year.

124. In the Kámrúp Division a few dead Teak-poles and Sâl-logs were worked out from the Kulsi plantation and sold, and a small quantity of Sâl-timber was worked out for use by the department.

Experimental tapping of Rubber-trees

125. In the Darrang Division all the suppressed trees in compartments 1, 2, and 3 of the Charduar Rubber Plantation were tapped to death to make room for the better trees, but only the insignificant quantity of 12½ seers of rubber was obtained, because the growth of these trees had already been much retarded, and they were stunted in growth by their stronger neighbours.

Experimental Cutch-boiling

126. Some cutch-boilers were got from Burma, and preliminary arrangements made to commence work and to teach people of this country, but no cutch had been actually manufactured when the year under report closed. The work is being continued under the direction of Mr. Copeland.

Removal of produce by consumers and purchasers.

127. From the small extent of departmental operation as above stated, it will be readily inferred that almost the whole removal of forest produce in Assam is carried on at present by purchasers, who buy the produce in the forests, and work it out themselves to a market.

Systems of collecting revenue

128. The systems of collecting revenue on such produce remain the same as described in paragraph 104 of last year's report. A revision of the rates of royalty has been proposed, and is now under the consideration of the Chief Commissioner.

The timber trade

129. The timber trade has improved very considerably during the year, and what is still more satisfactory is that the local trade has also increased as well as the export trade, for, after all, it is the want of a larger local trade in timber that prevents the more rapid increase of revenue, and thus is preventing us from doing more for the improvement of the forests.

130. In 1888-89 the money value of the export trade was estimated in round numbers at Rs. 125,000, whilst the local trade was estimated at Rs. 76,000. In the year under report the export trade is valued at Rs. 1,63,000, and the local trade at Rs. 96,000.

131. The increase in the export trade is solely due to the steadily-growing demand for Sâl-timber, whilst the increase in the local trade is chiefly due to the increased sale of inferior wood in the Cachar and Lakhimpur districts, which is used in the manufacture of tea-boxes.

132. The contractors to whom the monopoly of working the Dambu forest in the Gáro Hills was granted, made no fellings, and removed only part of the timber already converted by them, which makes a change in that arrangement necessary.

133. In the Kámrúp district, the ravages of the local plague, "*kála-azár*," have much interfered with the working of the Sâl forests, which are situated at the foot of the Khási Hills, where this disease is most virulent.

134. The saw-mills in the Lakhimpur district have extended their works, and the one at Tezpur, in the Darrang district, has also done well. A new mill by the same proprietor is about to be started in the Nowgong district, and planters in the Golághát sub-division are intending to start a saw-mill in the Nambor Forests.

135. The Assam Railways and Trading Company has felled on the area over which the monopoly of working was granted to them 993 trees, 218 of which were first and 775 second class, as compared with 132 first and 417 second class felled the previous year, and they would have done more, but their mill has only partially worked for five months in the year, on account of their substituting modern sawing apparatus for the old discarded machinery.

136. Out of the 93,843 cubic feet of timber from the above trees which passed through this saw-mill of the Assam Railways and Trading Company, 11,601 cubic feet have been converted into *burgas*, flooring boards, and waggon planks, and 51,061 cubic feet into tea-boxes, whilst 31,181 cubic feet, or an equivalent of 30 per cent., has cut to waste.

137. The local manufacture of tea-boxes on the larger plantations continues and increases.

138. Under the head "Miscellaneous" in Statement No. 54, and the abstract statements given in paragraphs 101 and 102 above, boats or dugouts, oars, drift and waif wood, dead wood, domestic and agricultural implements, and other small pieces of wood are included. The trade in these descriptions of wood is not very important; it shows a decrease of 48,054 cubic feet as compared with the previous year.

139. There was a decrease of 8,037 cubic feet on account of boats or dugouts, and of 44,485 cubic feet on account of dead wood, whilst drift and waif wood and implements, &c., showed an increase of 4,468 cubic feet.

140. The trade in charcoal and firewood is also small, because the ryots receive as much as they require free, and the working of the coal-fields at Makum in the Lakhimpur district by the Assam Railways and Trading Company has made good coal comparatively cheap, and charcoal is now very little used for drying tea, this being done at present almost exclusively by machinery, which is also heated with coal or coke. The increase in the trade of fuel during the year was small, only 34,630 cubic feet.

Sale of trees on land allotted for cultivation

141. The area of forest land allotted for cultivation, the amount of forest revenue realised, and due on account of the trees on such land, and the average amount of forest revenue per acre are shown in the following statement:—

Name of division.	Area of forest land allotted for cultivation in acres.				Amount of forest revenue realised and due.				Average amount per acre.			
	1888-89.	1889-90.	Increase.	Decrease.	1888-89.	1889-90.	Increase.	Decrease.	1888-89.	1889-90.	Increase.	Decrease.
					Rs.	Rs.	Rs	Rs.	Rs A. P.	Rs. A. P.	As P.	Rs. A. P.
Cachar	2,210	1,803	...	407	5,767	3,197	...	2.570	2 9 9	1 12 4	.....	0 13 5
Sylhet	484	1,319	835	...	3,269	1,219	...	2,050	6 12 0	0 14 9	.....	5 13 3
Darrang	893	202	...	691	5,912	546	...	5,366	6 9 11	2 11 3	.....	3 14 8
Nowgong	...	87	87	...	...	57	57	...	.....	0 10 6	10 6	.....
Sibsagar	1,840	2,649	809	...	3,284	3,750	466	...	1 12 6	1 6 8	.....	0 5 10
Lakhimpur	407	622	215	...	1,978	439	...	1,539	4 13 9	0 11 3	.....	4 2 6
Total	5,834	6,682	1,946	1,098	20,210	9,208	523	11,525	3 7 5	1 6 0	.....	2 1 5

142. This table shows that whilst there was an increase in the area of forest land allotted for cultivation of 848 acres, the decrease in receipts came to Rs. 11,002, and the average amount of timber tax per acre decreased from Rs. 3-7-5 in 1888-89 to Re. 1-6 in the year under report.

143. This is as was anticipated when the new rules for the valuation of forests on land to be allotted for cultivation were introduced; it proves that people have been more careful in selecting such lands, and chosen those which have no valuable forests on them. The result is that the great waste of timber formerly practised has ceased, and that the supplies of trees are now carefully husbanded, and made use of instead of being burned or allowed to rot on the ground, as was formerly the case.

Trade in minor forest produce.

144. The Tabular Statement No. 55 attached to this report shows the total outturn of minor forest produce.

In former years, it has been the practice to include bamboos under timber, but the arrangement now prescribed is to show them under minor forest produce. Reference about the yield of bamboos in the past years must therefore be made to the Tabular Statement No. 54 of former reports.

145. The Statement No. 55 attached to this report shows what descriptions of produce are now included under this head; the more important items, such as Rubber, Agar, Bamboos, Thatching-grass and Reeds, Cane, the *gurkati* permit system in the Gáro Hills, and free grants, will be separately noticed below; all the rest are of small importance as yet. A reference to the abstract at the end of Statement No. 55 will show what they amounted to in the year under report It should, however, be mentioned that grazing of cattle, chiefly buffaloes, which was allowed free until 1888, and fodder-grass, have, in the year under report, produced a revenue of Rs. 2,042.

The Caoutchouc or Rubber trade

146. As heretofore, Rubber continues to be the most valuable minor forest produce there is in Assam. It was mentioned in paragraph 142 of last year's report, how very unreliable the information about the outturn of Rubber in the Province is. The amendment of the Forest Act, which came into force during the year, Act V. of 1890, which authorizes the levying of duty on other forest produce as well as on timber, will allow of arrangements being made for the better control of the trade in Rubber. Proposals to this effect have already been submitted for the orders of the Chief Commissioner.

147. Deducting imports from exports of Rubber, it leaves the quantity presumably yielded by the trees in the Government forests as 3,419 maunds, which is 3,256 maunds less than the yield in the previous year. The outturn for the last ten years has been the following, and is quoted for ready comparison:—

Year.	1880 81	1881-82.	1882-83	1883-84	1884-85.	1885-86.	1886 87.	1887-88.	1888-89.	1889-90.
Quantity in maunds ...	4,374	5,951	4,743	8,150	7,290	5,675	2,277	6,563	6,675	3,419

148. The value of the Rubber maháls in the Province for the year under report was Rs. 105 less than in the previous year, no maháls having been sold in the year for the Sylhet and Kámrúp districts. The value of these maháls for the last nine years in the different districts is here entered for ready comparison:—

	1881-82.	1882-83.	1883-84	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.
	Rs.	Rs.	Rs.	Rs.	Rs	Rs	Rs	Rs	Rs.
Cachar	1,150	3,000	2,000	1,700	1,000	500	275	.....	.....
Sylhet	.. ...	.... .	.....	... .	... .	250	500	.....	.....
Goálpára	130	200	.....	.....	.....	.....	.....	.....	.....
Kámrúp	.....	1,610	905	....	.....	.....	300	100	.....
Darrang	6,951	21,100	22,100	22,100	22,100	22,100	21,005	21,005	21,005
Nowgong.....	765	182	295	280	128	88	69	.....	.....
Lakhimpur	12,900	6,100	10,000	5,080	7,600	11,650	10,600	10,600	10,600
Nága Hills	3,750	1,200	800	.....	.....	.....	.....	517	517
Khási „	.....	600	600	350	950	400	515	860	855
Total ...	25,646	33,992	36,700	29,510	31,178	34,988	33,264	33,082	32,977

149 The value of the Agarwood maháls in the Cachar and Sylhet districts was the same as in the previous year, Rs. 1,000 and Rs. 500 respectively; but Rs. 250, or half the value of the mahál for 1888-89 in the Sylhet district, was realized in 1889-90, and Rs. 100 out of the amount of Rs. 500 due for the mahál in the same district for 1889-90 was not realized before the close of the year.

Total outturn in Bamboos.

150. The Bamboos removed during the year were the following, as compared with the previous year:—

	Number.		Value.	
	For trade.	Free grants.	For trade. Rs.	Free grants. Rs.
1888-89	1,769,217	1,731,435	4,763	9,311
1889-90	2,080,168	2,171,785	5,911	9,509
Increase	310,951	440,350	1,148	198

151. The quantities of reeds and thatching-grass removed in the year under report were the following, as compared with the previous year. Royalty is paid on this produce in Cachar and Sylhet, but not in the valley districts, unless it is obtained from reserves or exported from the Province beyond Dhubri and Fakirganj:—

Total outturn in reeds and thatching-grass.

Thatching-grass.

Year.	Dhubri and Fakirganj Revenue-station.				Cachar				Sylhet.			
	Number of cubic feet.		Value.		Number of cubic feet.		Value.		Number of cubic feet.		Value.	
	For trade.	Free grant.	For trade.	Free grant	For trade.	Free grant.	For trade.	Free grant.	For trade.	Free grant.	For trade.	Free grant.
			Rs.				Rs.	Rs.			Rs.	Rs.
1888-89	751,943	.....	1,880	.....	7,620	9,808	18	24	301,921	338,796	755	847
1889-90	1,004,088	.....	2,510	.....	3,325	49,400	8	123	1,099,574	571,726	2,748	1,429
Plus or *minus* ..	+252,145	.....	+630	.....	—4,295	+39,592	—10	+99	+797,653	+232,930	+1,993	+82

Reeds.

Year.	Dhubri and Fakirganj Revenue-station.				Cachar				Sylhet.			
	Number of cubic feet		Value.		Number of cubic feet.		Value.		Number of cubic feet.		Value.	
	For trade.	Free grant.	For trade.	Free grant.	For trade	Free grant.	For trade	Free grant.	For trade.	Free grant.	For trade.	Free grant.
			Rs.				Rs.	Rs			Rs.	Rs.
1888-89	44,137	.....	1,379	.....	.....	1,072	.....	33	6,668	40,224	208	1,357
1889 90	29,280	.....	915	.....	447	4,680	14	146	5,778	59,789	181	1,869
Plus or *minus* ..	—14,857	.....	—464	.....	+447	+3,608	+14	+113	—890	+19,565	—27	+612

In addition to the above, several thatching-grass mahâls were sold in the Sylhet district, and realized during the year Rs. 1,021.

152. The cane mahâls, which were sold in the valley districts in 1888-89 for five years for an aggregate amount of Rs. 2,848 per annum, as detailed in paragraph 144 of last year's report, remained in force during the year. No additional mahâls were sold, but Rs. 65 were paid in advance for the Golâghât cane-mahâl in the year.

The cane trade.

153. Besides this, cane removed from forests not included in the mahâls in the Assam valley districts was charged for separately, and, similarly, the cane removed from the forests in Cachar and Sylhet was taxed at the forest revenue stations. All such cane and its value and cane granted free is shown and compared with the outturn of the previous year in the following table:—

Year.	In the Assam Valley districts.				In Cachar and Sylhet.			
	Number of bundles.		Value.		Number of bundles.		Value.	
	For trade.	Free grants.	For trade.	Free grants.	For trade.	Free grants.	For trade.	Free grants.
			Rs	Rs.			Rs.	Rs.
1888-89	101,812	83,682	758	625	29 352	19,978	1,845	1,245
1889-90	138,042	51,221	1,053	380	24,426	24,857	1,527	1,554
Plus or *minus*	+36,230	—32,461	+295	—245	—4,926	+4,879	—318	+309

This is an increase in the cane sold, and a decrease in the free grants of cane in the Assam Valley districts, whilst in Cachar and Sylhet there is a decrease in the quantity of cane removed for trade and a similar increase in free grants; it is not unlikely that the former was caused by more applications for free grants, but none of these variations in quantity amount to more than ordinary fluctuations in trade or in the requirements of the ryots.

154. The *gurkáti* permit system in the Gáro Hills remained the same as was described in paragraph 148 of last year's report. The fee charged for a Gáro *gurkáti* permit was reduced from Rs 2 to Re. 1 per annum. The number of *gurkáti* permits sold during each of the last eight years is given below to show the gradual development of the system and for ready comparison:—

The *gurkáti* permit system

	1882-83.	1883 84.	1884-85.	1885-86.	1886 87	1887 88.	1888 89.	1889 90.
Gáro permits	2,358	2,300	1,388	2,282	2,764	2,899	2,583	2,352
Foreign permits	1,223	2,210	2,073	3,870	4,147	5,893	6,575	7.572
Total	3,581	4,510	3,461	6,152	6,911	8,792	9,158	9,924
In Government forests ..	3,043	4,029	2,886	5,284	5,678	6,120	6,460	6,351
„ zemindári forests ...	538	481	575	868	1,233	2,672	2,698	3,573
Total	3,581	4,510	3,461	6,152	6,911	8,792	9,158	9,924

155. The increase in foreign permits and decrease in Gáro permits is attributed by the Divisional Forest Officer to stricter supervision, which has prevented Gáro permits being used by foreigners, as had been done in the past.

156. The increase in the total number of permits sold was 766, as compared with the previous year, but it took place entirely in the zemindári forests. The sale from the Government forests was less by 109 permits : the Divisional Officer assigns no reason for this change ; the zemindári forests in which the increase took place are those managed by Government.

157. The free grants made during the year are shown in the Tabular Statements Nos. 54 and 55 attached to this report, and also in the abstract statements given in paragraphs 101 and 102 above. They increased considerably in Cachar and Sylhet, but decreased in the Assam Valley districts. The free grants made to the Assam Railways and Trading Company were about double of what they had been in 1888-89, probably because this concession came to an end during the year.

Free grants of forest produce

158. The free grants made under concessions of the Local Government, and such as were made under executive orders, are shown separately in Appendix V of this report ; the latter consists chiefly of rewards given by the Divisional Forest Officers for the clearing of boundary-lines or fire-lines, or for the watching in the fire season and for extinguishing fires.

159. As in former years, by far the greatest portion of the free grants is forest produce allowed to ryots for home consumption. They are, as a rule, obtained from unclassed forests, except the rewards for work done, and in cases specially sanctioned by the Chief Commissioner, when free grants are made in reserved forests.

160. The value of free grants made to ryots for home consumption during the year as compared with 1888-89, according to districts, was as follows :—

	1888-89. Rs.	1889-90. Rs.
Cachar...	644	1,770
Sylhet	15,322	20,810
Goálpára	46,333	7,075
Kámrúp	9,618	10,282
Darrang	15,404	15,005
Nowgong	23,928	11,208
Sibságar	18,247	30,265
Lakhimpur	1,704	3,126
Total...	1,31,200	99,541

161. The large increase in Cachar and Sylhet is due to the people having only in the year under report fully realized the great advantage of the home-consumption permits, and although they have to pay a fee of Re. 1 for each, they have availed themselves of the privilege to a much greater extent than in former years.

162. In the Assam Valley districts, on the contrary, the free grants have been less in three districts out of the six, and very much so in the Goálpára district, which decrease is ascribed by the Divisional Officer to the more careful registration and correct valuation, the consequence of the orders issued in the Chief Commissioner's Circular No. 83, dated the

31st October 1889, which have caused Deputy-Commissioners and Forest Officers to issue free permits more carefully, and only for such quantities as were actually required and not for the full quantity allowed by the rules. Kámrúp shows an increase, because a number of home-consumption permits had already been issued with the *pattas* for the land before receipt of the Chief Commissioner's orders above quoted, and in the Sibságar and Lakhimpur districts the increase is ascribed by the Divisional Officers to the indifference of the mauzadárs in this respect, who will not take care to enquire into the needs of each family, but rather issue permits for the full quantity allowed, and in some cases even more. The conditions under which these free grants for home consumption are made remain much the same as described in paragraphs 156 and 157 of last year's report.

163. The amounts shown above are merely rough estimates, and must be taken as such, because the tahsildárs and mauzadárs can give but little time to this matter, and fluctuations in the demands for forest produce are natural, since, with the exception of firewood, the forest produce granted free is only required once in three or four years; the practice has to be kept up and is of much importance, as it prevents the growth of prescriptive rights.

164. All duplicates of permits issued by tahsildárs and mauzadárs were checked in the divisional forest offices, and the permit books are inspected twice a year at the houses or offices of the tahsildárs and mauzadárs, as has been the practice in former years.

165. In addition to the above grants to ryots, the Chief Commissioner has allowed 51 first-class and 48 second-class trees, equal to 3,000 cubic feet of timber, of a value of Rs. 408, free for a public building in Dibrugarh during the year.

166. The free grants to the Assam Railways and Trading Company were the following; they are, as already stated, about double of what they were in the previous year; the five years' concession granted to this Company came to an end on the 6th of February 1890:—

Description of trees.	No.	Rates. Rs.	Value. Rs.	Purposes for which used. For sleepers.	For buildings.	For other purposes.
First-class trees...	3,602	6	21,612	3,502	100	.....
Second-class trees	621	2	1,242	621	.....	.....
Total.....	4,223	.....	22,854	4,123	100	.....

167. The boats or dugouts brought into the Lakhimpur district from beyond the Inner Line, and which under present rules pay no royalty, have been the following during the last six years:—

1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.
40	208	160	20	135	64

Imports and exports of forest produce.

168. As heretofore, foreign timber and other forest produce was imported into the Province from Manipur, the Lushai country, Hill Tipperah, and Bhutan.

169. The imports from Manipur and the Lushai country were as follows, as compared with the previous year:—

	1888-89. Number.	1888-89. Cubic feet.	1889-90. Number.	1889-90. Cubic feet.
Logs	1,994	58,073	2,797	51,668
Poles	39	156	3	12
Posts and planks	80	624	28	110
Fuel	.....	16	.....	218
Bamboos	186,100	.....	41,325	.....
Canes (bundles)	1,415	.....	153	.....

170. This is an increase in the number of logs imported, but they were of small dimensions, so much so that the cubic contents were actually less than in the previous year. The decrease in the import of poles is unimportant; that in bamboos and cane is due to the fact that they are worked out in the cold season, which could not be done to the same extent in the year under report on account of the military operations in the Lushai Hills.

171. The imports of timber and other forest produce from Hill Tipperah show, with the exception of fuel, an increase, since those forests are situated in very convenient localities, on the banks of navigable streams, and the tax on the same has been lowered

to stimulate the working of those forests, whilst conservancy is not thought of; besides which, the Government forests in the Sylhet district, where the Tipperah produce is chiefly used, are of such limited extent, and have been so overworked in former times, that the supplies for the markets must necessarily be procured to some extent from Hill Tipperah. The imports in the last two years were the following :—

	1888-89.		1889-90.	
	Number.	Cubic feet.	Number.	Cubic feet.
Logs	7,225	156,870	9,898	182,609
Fuel	.....	5,302	.....	3,906
Bamboos	3,454,755	.....	4,169,098	.....
Canes (bundles)	13,863	.....	20,495	.....
Thatching-grass and reeds	168,200	.....	229,048	.....

172. Appendix VI. of this report gives, amongst other information, full details about the imports of timber and other forest produce into Cachar and Sylhet.

173. The timber imported from Bhutan was much less than in the previous year, although the pass-fee on small logs had been reduced. The following have been the imports during the last eight years :—

	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.
Logs ...	168	80	29	...	146	1,043	363	57
Dugouts	230	146	30	63	133	684	303	222

174. The import of Rubber, as registered in the Province for the last six years, has been the following :—

	1884-85. Maunds.	1885-86. Maunds.	1886-87. Maunds.	1887-88. Maunds.	1888-89. Maunds.	1889-90. Maunds.
From Bhutan..... ...	20	31	37	50	590	44
„ Towang	134	175	267	126	53	...
„ Dafla Hills	137	459	86	43	151	293
„ Nága, Mishmi, and Singpho Hills.	287	215	597	498	815	813
„ Lushai Hills	224	55	550	210	129	30
„ Manipur	... ..	48	.....	.....	.....	... .
„ Bengal by steamer	68	13	26	43	35	38
Total	870	996	1,623	970	1,773	1,218

175. There is strong reason to believe that these figures do not represent correctly the rubber imported, since only 293 maunds have been registered as imported from the Daffla Hills, which, it is presumed, includes the Aka Hills also, whilst it is well known that the mahaldárs of Darrang import much more than this, and only 813 maunds are shown as imported from the Nága, Mishmi, and Singpho Hills, whilst the Lakhimpur Divisional Forest Officer has ascertained from the Deputy-Commissioner of the district that 1,064 maunds and 38 seers were imported from the Nága, Mishmi, and Singpho Hills, and of this quantity, 650 maunds are believed to have been brought from Upper Burma, to avoid the payment of duty, which is Rs. 12 per maund in that country. No positive information is available on this subject, but it is known that the Kayas or Marwari merchants have paid commission on that quantity to their Agents at Margherita, Ledo, and Kherampani, and, through the courtesy of the Agent and General Manager, Assam Railways and Trading Company, we also know that 915 maunds and 20 seers were carried by that railway to Dibrugarh in the year under report, as compared with 2,144 maunds and 7 seers in the previous year, as shown in the following table:—

Months.	1888-89. Mds.	Srs.	1889-90. Mds.	Srs.
April	569	9	407	10
May	1,057	2	200	20
June	131	4	106	20
July	21	15	5	20
August	45	34	8	30
September	5	2	2	20
October	.....		.....	
November	4	10	5	30
December	13	0	6	10
January	11	10	11	0
February	48	30	50	20
March	237	11	111	0
Total	2,144	7	915	20

176. The export of Rubber by steamer from Assam for the last six years has been as follows:—

	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.
	Maunds.	Maunds.	Maunds.	Maunds.	Maunds.	Maunds.
From Cachar	99	8	11	...	163	24
„ Sylhet	110	26	59	35		
„ Goálpára	588	728	297	221	593	298
„ Kámrúp.....	100	641	149	182	610	550
„ Darrang.....	2,717	1,440	1,375	493	1,212	753
„ Nowgong	963	1,510	323	554	470	41
„ Sibságar	200	741	197	1,653	708	877
„ Lakhimpur	2,752	1,429	1,463	4,115	4,472	2,094
Total	7,529	6,523	3,874	7,253	8,228	4,637

177. No Rubber was registered as exported by boat during the year from Cachar and Sylhet, and the decrease in export by steamer is also considerable for that part of the Province; it is not unlikely that the impressments of labour for the Lushai Expedition have interfered with the collection of rubber.

178. The decrease from the Assam valley districts is also large, the quantity exported being not much more than half of that exported in the previous year, the largest decrease is in Lakhimpur, but the quantity registered in Calcutta differs only by one maund from that reported by the Divisional Forest Officer, who obtained his information at Dibrugarh from the steamer agent, so it is probably correct, unless rubber has been shipped surreptitiously, as was attempted last year in Darrang. There can be no doubt that the trade in this, the most valuable of all our forest products, deserves stricter control than it has been hitherto possible to exercise over it, for more reasons than one. The amendment of the forest Act, authorizing the collection of duty on Rubber, will now admit of this being done.

179. The total exports of forest produce from the Province by steamers and boats as registered at Dhubri and Bhairab Bázár were the following :—

Name of forest produce.	Denomination.	Registered at Dhubri.				Registered at Bhairab Bázár.			
		Imports.		Exports.		Imports.		Exports.	
		By boat.	By steamer.	By boat.	By steamer.	By boat.	By steamer.	By boat.	By steamer.
Timber.....	No.	...	994	402,827	1,374	...	303	1,590	5,209
Caoutchouc	Mds.	...	37	...	4,613	...	1	.....	24
Lac ... Stick	„	...		...	14,730	...	2	.....	240
Lac ... Shell	„	25	12	460	...	...	4	.....	...
Lac-dye	„	...	...	...	...	...	...	.....	...
Bamboos	No.	..	...	...	...	..	...	1,043,700	...
Thatching-grass	c.ft.	...	...	1,004,088	...	...	...	.....	..
Reeds	„	...	...	29,280	...	...	...	.....	...
Canes	Mds.	...	125	5,242	983	...	...	6,562	...

180. The imports of timber are slightly less than in the previous year and altogether insignificant, whilst the exports are large and increasing steadily.

181. The exports of Rubber have already been noticed above, the small quantities imported by steamer can only have been shipments to merchants for purposes of collecting stock, since no rubber manufactory exists in the Province.

182. The falling off in the export of lac is very great, and can only be due to a slackness in the trade, because the facilities for producing it are very great in the Province, and have not become less in any respect.

183. Bamboos are not much exported from the Assam valley districts, there were none in the year under report. The exports from Cachar and Sylhet were 392, 300 less than in the previous year, when the number exported was very large. With that exception the number exported in the year under report was greater than it had ever been before.

184. The export of thatching-grass and reeds has again decreased to some extent, and no reason is assigned for this decrease by the Divisional Officer. As it has been continuous for several years now, it cannot be a fluctuation in trade only ; the cause will be ascertained from the traders next season if possible.

185. The export of cane has increased, as compared with 1888-89, but it is nothing like so large as it used to be; this also requires careful investigation to ascertain the cause and to provide a remedy.

Additions to and changes in, Forest Rules

186. The additions to, or changes in, Forest Rules made during the year were the following:—

(*a*) New river rules were sanctioned for the Assam valley districts.
(*b*) The forest revenue station of Pobha, on the Brahmaputra, was closed.
(*c*) The free use of drift timber was restricted to ryots collecting it for their own domestic and agricultural purposes, and not for purposes of trade.
(*d*) Deputy-Commissioners received power to reduce the royalty or to exempt timber altogether from royalty, if brought by hill people from beyond the Inner Line, if necessary, for political reasons.
(*e*) The rules regarding the valuation of trees on land to be allotted for cultivation were revised.
(*f*) Additional orders regarding the issue of free permits to ryots to obtain forest produce for home consumption were issued
(*g*) The fee payable by Gáros on a *gurkáti* license was reduced from Rs. 2 to Re. 1.
(*h*) Hunting, shooting, or fishing in reserved forests without a license was prohibited.

CHAPTER V.—FINANCIAL RESULTS.

General.

187. Forest receipts and expenditure during the year came to more than in any year previous; they were as follows:—

	Rs.
Revenue	3,79,498
Expenditure	2,57,129
Surplus	1,22,369

Comparing this with 1888-89, it shows an increase in revenue by Rs. 75,616 and an increase in expenditure by Rs. 47,224.

188. The estimated value of the free grants allowed during the year came to Rs. 1,22,903, as compared with Rs 1,42,830, or Rs. 19,927 less.

189 The forest receipts and expenditure surplus and deficit since Assam was separated from Bengal in 1874-75, have been the following:—

	1874-75	1875 76	1876 77.	1877-78	1878-79	1879 80	1880 81	1881-82
	Rs.	Rs	Rs.	Rs	Rs	Rs.	Rs	Rs.
Revenue	64,749	1 07,302	81,568	1,34,326	1,61,779	1,64,336	1,68,997	1,66,053
Expenditure	59,522	61,884	89,920	1,00,287	1,26,027	1,32,830	1,42,725	1,65,361
Surplus	5,227	45,418	.....	34,039	35,752	31,506	26,272	692
Deficit	.....	.....	8,352	.....	.....	.....	.....	.....

	1882-83	1883-84	1884-85.	1885 86.	1886-87.	1887-88.	1888 89.	1889-90
	Rs.	Rs.	Rs	Rs	Rs	Rs.	Rs	Rs.
Revenue	2,48,605	2,11,445	1,80,413	1,96,657	2,12,011	2,67,312	3,03,882	3 79,498
Expenditure	1,71,823	1,99,562	1,97,700	2,11,494	2,12,287	2,26,892	2,09,905	2,57,129
Surplus	76,782	11,883	.....	.....	.....	40,420	93,977	1,22,369
Deficit	.....	.....	17,287	14,837	276	.....	.....	.....

The steady development of forest resources during the past, as shown above, is a guarantee of the soundness of the system and for the continuance of the income from this source.

190. The revenue collections during the year under report are shown in the following table under the main service heads, as compared with 1888-89:—

Revenue

Revenue budget heads.	1888-89.	1889 90.	Increase.	Decrease.
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
I.—Timber and other produce removed from the forests by Government agency	6,694 8 0	8,103 6 10	1,408 11 10	....
II.—Ditto by consumers and purchasers	2,58,026 6 2	3,21,678 12 5	63,652 6 3	....
III.—Drift and waif-wood and confiscated forest produce ...	2,715 9 3	2,510 13 3	....	204 12 0
IV.—Revenue from forests not managed by Government ...	10,325 4 3	15,830 15 6	5,505 11 3	....
V.—Miscellaneous	26,120 1 7	31,373 10 4	5,253 8 9	.....
Total	3,03,881 13 3	3,79,497 10 4	75,820 9 1	204 12 0

The small increase under "I. -Timber removed by Government agency" is due entirely to the experimental timber operations carried on in the Goálpára Division, and the advantageous sale of that timber.

The increase under "II—Timber removed by consumers or purchasers" has again been large, and was the consequence of the greater activity in the timber trade in the Cachar, Goálpára, Kámrúp, and Lakhimpur districts.

Under "III.—Drift and waif-wood and confiscated forest produce," the small decrease is unimportant; the collections under this head were less in the Sylhet, Kámrúp, Lakhimpur, and Gáro Hills divisions.

The increase under "IV.—Revenue from forests not managed by Government" took place in the Cachar, Kámrúp, and Gáro Hills Divisions, and is due to the general activity which prevailed in the timber trade and greater imports from Manipur, the Khási Hills, and the larger sales in the zemindári forests in the Gáro Hills.

The increase under "V.—Miscellaneous" is due, as in the previous year, to the larger issue of home-consumption permits in Cachar and Sylhet, on which a fee of Re. 1 each is collected in those districts, and also to the collection of more pass fees on timber imported from Hill Tipperah into Sylhet.

191. The forest expenditure during the year under each main service head, as compared with 1888-89, was as follows:—

Expenditure

Budget head.	1888-89.	1889-90.	Increase.	Decrease.
A.—Conservancy and Works.	Rs. As. P	Rs As P.	Rs. As. P.	Rs. As. P.
I.—Timber and other produce removed from the forests by Government agency.	1,171 1 4	4,318 8 2	3,147 6 10	.....
II.—Timber and other produce removed from the forests by consumers and purchasers.	9,654 7 0	10,951 15 8	1,297 8 8	.....
III.—Drift and waif-wood and confiscated forest produce.	134 9 9	173 4 9	38 11 0	.....
IV.—Revenue from forests not managed by Government.	.....	510 9 6	510 9 6	.....
V.—Rent of leased forests and payments to shareholders in forests managed by Government.	.....	....	.....	.....
VI.—Live and dead stock	10,183 7 2	21 468 11 11	11,285 4 9	.....
VII.—Communications and buildings	14,570 10 2	20,540 5 5	5,969 11 3	.....
VIII.—Demarcation, improvement, and extension of forests.	32,360 15 9	59,316 2 9	26,955 3 0	.....
IX.—Miscellaneous	4,621 13 0	11,010 7 0	6,388 10 0	.....
Total of A.—Conservancy and Works...	72,697 0 2	1,28,290 1 2	55,593 1 0	.....
B.—Establishments.				
I.—Salaries	1,11,774 13 9	1,05,896 6 7	.....	5,878 7 2
II.—Travelling allowances.....	19,980 2 3	17,413 4 4	.....	2,566 13 11
III.—Contingencies	5,452 12 8	5,529 4 5	76 7 9	.....
Total of B.—Establishments ...	1,37,207 12 8	1,28,838 15 4	76 7 9	8,445 5 1
Grand Total of Expenditure.....	2,09,904 12 10	2,57,129 0 6	55,669 8 9	8,445 5 1

The increase in expenditure under "A I.– Produce removed from the forests by Government agency" was caused by the experimental timber works carried on in the Goálpára Division, which produced more than double the amount spent in revenue; there was also some more carting of timber done in the Gáro Hills Division than in the previous year.

The increase under "A II.—Timber and other produce removed from the forests by consumers and purchasers" is due chiefly to the employment of a larger temporary establishment to look after the revenue collection in Sylhet, instead of paying commission for this, as was done before, and the employment of a few more men in other divisions, also to look after the removal of timber and other produce by purchasers, which supervision had to be increased in consequence of the greater activity in the timber trade; there was a corresponding increase in revenue.

The expenditure under "A III. — Drift and waif-wood" is small, and the increase so trifling that no remarks regarding it are necessary.

The increase in expenditure under "A IV. — Revenue from forests not managed by Government," is only nominal, it is the commission paid for the sale of *qurkáti* permits in zemindári forests in the Gáro Hills, which was formerly classified under "A II. — Timber and other produce removed from the forests by consumers and purchasers."

The increase under "A VI. — Live and dead stock" is accounted for by the purchase of six elephants and the feed and keep of these animals, whilst in the previous year only one was bought. These animals were indispensable for the work which had to be done.

The increase under "A VII. — Communications and buildings" is due to a new road made in the Charduar reserve, Darrang Division, the preparing of bricks for a new office building in Sylhet, the construction of an inspection house at Margherita in the Lakhimpur division, and exceptionally large repairs to the buildings in the Goálpára Division.

The increase under "A VIII. — Demarcation, improvement, and extension of forests" is large, and chiefly accounted for by the survey operations conducted by the Imperial Survey Branch in the forests of the Goálpára Division, but also by the increase in area planted at the Charduar rubber plantation and the extension of fire protection to all the Sâl forests in the Goálpára, Kámrúp, Nowgong, and Gáro Hills Divisions, and the cutting of climbers over larger areas in the Sâl forests of the Goálpara, Kámrúp, and Nowgong Divisions.

The increase under "A IX.—Miscellaneous" is so large on account of the refunds of revenue ordered by the Chief Commissioner in the Sylhet Division to Messrs. Finlay, Muir, and Co, and to the Assam Railways and Trading Company in the Lakhimpur Division. Some refunds had also to be made to the zemindárs in the Gáro Hills, on their proving a certain forest area, from which timber had been removed, to be theirs.

The decrease in expenditure under "B I.—Salaries" and "B II.—Travelling allowances" is accounted for by the temporary transfer of a Deputy-Conservator to the Central Provinces and of a Sub-Assistant-Conservator to the Imperial Forest Survey Branch. The increase under "B III.—Contingencies" is small and unimportant, requiring no notice here.

Surplus and deficit according to divisions

192. The revenue collected and expenditure incurred in the different divisions and the surplus or deficit resulting were as follows:—

Name of division.	Receipts.			Expenditure.			Surplus.			Deficit.		
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Direction	166	10	0	30,549	4	10	.....			30,382	10	10
Working Plans	47	9	2	11,554	7	3	.....			11,506	14	1
Cachar	52,100	10	1	16,388	3	2	35,712	6	11	.....		
Sylhet	35,016	13	0	15,534	15	6	19,481	13	6	.....		
Goálpára	1,01,915	14	9	50,630	14	3	51,285	0	6	....		
Kámrúp	52,530	6	4	28,741	5	10	23,789	0	6	.....		
Darrang	29,405	6	1	20,678	7	9	8,726	14	4	.....		
Nowgong	9,636	6	7	8,873	0	11	763	5	8	.....		
Sibságar and Nága Hills	13,277	12	5	14,957	3	1	....			1,679	6	8
Lakhimpur	46,788	12	0	31,585	5	11	15,203	6	1	....		
Khási Hills.....	2,531	2	3	3,166	4	1	.....			635	1	10
Gáro „	36,080	3	8	24,469	7	11	11,610	11	9	.....		
Total	3,79,497	10	4	2,57,129	0	6	1,66,572	11	3	44,204	1	5

This is very much the same as in the previous year, there being next to no receipts in the Direction and Working Plans Divisions, the expenditure, or nearly the whole of it, appears as deficit; in the other two divisions, which do not as yet pay their way, the "Sibságar and Nága Hills" and the "Khási and Jaintia Hills" the deficit is considerably less than what it had been in the previous year.

In the Cachar Division the surplus is Rs. 12,947 more than in the previous year, which is due to increased receipts, the consequence of a greater demand for timber. The expenditure was about the same as in the previous year.

In the Sylhet Division the surplus is Rs. 4,253 less than in 1888-89, owing chiefly to the large refund of revenue made during the year.

The receipts were Rs. 2,479 more than in the previous year.

The Goálpára Division shows an increase in receipts by Rs. 34,191, but, as already stated, there was also a large increase in expenditure, Rs. 28,226, chiefly on account of the forest survey carried on and the extension of fire protection, otherwise the surplus would have been much greater.

In the Kámrúp Division receipts were Rs. 10,670 better, whilst the expenditure was about the same as last year, hence the increased surplus of Rs. 9,114.

The receipts in the Darrang Division fell off by Rs. 2,894 on account of the change in the system of collecting the royalty on tea-boxes manufactured at the Tezpur saw-mill, which is now only paid after the sale of the boxes, and expenditure increased by Rs. 1,921 on account of extensive plantation work, which made the surplus Rs. 4,815 less than in the previous year.

In the Nowgong Division receipts increased by Rs. 1,141 and expenditure by Rs. 639, making the surplus, Rs. 503, more than the year before.

In the Sibságar Division there was a small increase in receipts by Rs. 1,369 and a decrease in expenditure by Rs. 145, as the division was in charge of a ranger instead of a Deputy-Conservator, which made the deficit Rs. 3,515 less than in the previous year.

The receipts in the Lakhimpur Division were Rs. 15,569 better than in 1888-89 on account of larger quantities of timber having been removed by purchasers, but expenditure was also higher by Rs. 7,914 on account of the purchase of two elephants, building works, and a refund of revenue, still the surplus was Rs. 7,655 more than last year.

In the Khási Hills Division receipts increased by Rs. 480, and expenditure decreased by Rs. 353, hence the decrease in deficit by Rs. 833.

The receipts in the Gáro Hills division fell off by Rs. 323, and expenditure was less by Rs. 1,165, thus causing a slight increase in the surplus by Rs. 842.

193. The value of live and dead stock at the close of the year was Rs. 1,38,595 or Rs. 13,339 more than at the commencement.

194. The outstanding revenue at the end of the year was Rs. 76,195, or Rs. 16,403 less than at the close of the previous year, as shown in detail in Statement No. 60 attached to this report.

CHAPTER VI.—General Remarks.

Establishments.

195. No change took place in the controlling and executive staff of the Forest Department during the year.

Mr. J. T. Jellicoe officiated in the first grade of Deputy-Conservators for three months from the 30th of December 1889.

Mr. A. J. Mein, Deputy-Conservator of Forests of the third grade, had privilege leave for three months from the 1st July 1889.

Mr. C. G. D. Fordyce, Deputy-Conservator of Forests, fourth grade, obtained an extension of six months' furlough with effect from the 29th of April 1890.

Mr. F. S. Barker was confirmed in the fourth grade of Deputy-Conservators, and transferred permanently to the Central Provinces with effect from the 20th December 1889.

Mr. D. P. Copeland was confirmed as Deputy-Conservator of the fourth grade with effect from the 20th December 1889. He had three months' privilege leave granted him with effect from the 1st July 1889.

Mr. I. J. Campbell officiated in the fourth grade of Deputy-Conservators from the 20th December 1889 until the close of the year. He was on privilege leave for three months from the 8th December 1889.

Mr. H. G. Young was confirmed in the first grade of Assistant-Conservators with effect from the 20th December 1889. He was also deputed on special duty to the North Cachar Hills from the 29th October until the 25th November 1889.

Mr. C. P. Fisher passed in Assamese by the lower standard, and was promoted to the second grade of Assistant-Conservators, with effect from the 6th May 1889.

Mr. J. C. Kelly was temporarily transferred to the Imperial Forest Survey Branch from the 7th December 1889 until the close of the year.

Babu Upendra Nath Kanjilal, Forest-ranger, fourth grade, was deputed to the Forest School at Dehra Dun.

Conservator's Tour.

196. The Conservator left head-quarters on the 2nd November 1889, and returned on the 4th May 1890.

The number of days spent in the different divisions was as follows:—

Cachar	18
Sylhet	11
Goálpára	27
Kámrúp	18
Darrang	17
Nowgong	10
Sibságar	24
Lakhimpur	14
Khási and Jaintia Hills	33
Gáro Hills	12
	184

Services of Officers.

197. Mr. J. T. Jellicoe was in charge of the Lakhimpur Division during the whole year; he travelled for 175 days.

Mr. A. J. Mein held charge of the Kámrúp Division from the commencement of the year until the 30th of June 1889, and of the Goálpára Division from the 14th of October 1889 until the close of the financial year; he travelled for 175 days.

Mr. D. P. Copeland was in charge of the Goálpára Division from the commencement of the year until the 30th June 1889, and of the Kámrúp Division from the 14th October 1889 until the close of the financial year; he had also charge of the Gáro Hills Division from the 8th of December until 6th of March, in addition to his own duties; he travelled for 102 days.

Mr. T. J. Campbell was in charge of the Gáro Hills division from the commencement of the year until the 8th of December 1889, and again from the 7th of March 1890 until the close of the year; he also held charge of the Goálpára Division from the 1st of July until 13th of October 1889, in addition to his own duties; he travelled for 134 days.

Mr. H. G. Young held charge of the Cachar Division from the commencement of the year until the 20th October, and again from the 25th November until the close of the year; he travelled for 104 days.

Mr. C. P. Fisher held charge of the Working Plans Division during the whole year, and of the Kámrúp Division, in addition to his own duties, from the 1st July until the 13th of October 1889; he travelled for 248 days.

Mr. J. C. Kelly held charge of the Darrang Division from the commencement of the year until the 7th of December; he travelled for 76 days.

Babu Jogesvar Sur was in charge of the Nowgong Division during the whole year, and of the Darrang Division, in addition to his own duties, from the 7th of December 1889 until the close of the financial year; he travelled for 310 days.

Babu Tara Kisor Gupta held charge of the Sylhet Division during the whole year, and of the Cachar Division, in addition to his own duties, from the 20th of October until 25th November 1889; he travelled for 166 days.

Babu Sri Gopal Banerji, Forest-ranger, fifth grade, held temporary charge of the Sibságar Division during the whole year; he travelled for 330 days.

ANNUAL RETURNS

AND

APPENDICES

RETURNS.

FORM No. 49.

FOREST DEPARTMENT, ASSAM.—AREA OF RESERVED FORESTS, PROTECTED FORESTS, AND UNCLASSED STATE FORESTS AND WASTE LANDS, 1889-90.

Division.	Range.	Civil district or territory.	Name of forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1890.		Number and date of Notification of addition or transfer.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles	
			(a) Reserved Forests.							
Cachar	Sonai	Cachar district ..	Upper Jiri	15,360	24	....	.....	15,360	24	
Ditto....	Ditto	Ditto ditto ..	Lower "	9,002	14	....	.....	9,002	14	
Ditto....	Ditto	Ditto ditto ..	Barak	42,880	67	....	.....	42,880	67	
Ditto....	Ditto	Ditto ditto ..	Sonai	11,520	18	....	.....	11,520	18	
Ditto....	Ditto and Matijuri.	Ditto ditto ..	Inner Line	325,760	509	....	.....	325,760	509	
Ditto....	Matijuri.....	Ditto ditto .	Katakhal	51,200	80	....	.....	51,200	80	
Ditto....	Ditto	Ditto ditto ..	Dhaleswari	20,451	32	....	.....	20,451	32	
			Total	476,173	744	...	.....	476,173	744	
Sylhet	Kanairghat	Sylhet ditto ..	Langai and Singla.	108,800	170	....	.....	108,800	170	
			Total	108,800	170	....	.....	108,800	170	
Goálpára ..	Eastern	Goálpára ditto ..	Bijni Duár	77,440	121	....	.....	77,440	121	
Ditto....	Ditto	Ditto ditto ..	Sidli	43,757	68	....	.....	43,757	68	
Ditto....	Ditto	Ditto ditto ..	Bengtol and Darugaon.	7,470	12	....	.....	7,470	12	
Ditto....	Ditto	Ditto ditto ..	Bhumeswar Hills..	4,033	6	....	.....	4,033	6	
Ditto..	Ditto	Ditto ditto ..	Bhur	3,855	6	....	.....	3,855	6	
Ditto....	Ditto and western.	Ditto ditto ..	Chirang Duár No. 1.	69,203	108	....	.....	69,203	108	
Ditto....	Western	Ditto ditto ..	" No. II.	90,643	142	....	.....	90,643	142	
Ditto....	Ditto	Ditto ditto ..	Ripu Duar	41,632	65	....	.....	41,632	65	
Ditto....	Ditto	Ditto ditto ..	Jengasi Charaidaka	1,730	3	....	.....	1,730	3	
Ditto....	Ditto	Ditto ditto ..	Atiabari	9,180	14	....	.....	9,180	14	
Ditto....	Ditto	Ditto ditto ..	Panbari and Pochadaveri.	3,290	5	....	.....	3,290	5	
Ditto....	Ditto	Ditto ditto ..	Saukos	28,800	45	....	.....	28,800	45	
Ditto....	Ditto	Ditto ditto ..	Muktaigaon	3,200	5	..	.....	3,200	5	
Ditto....	Guma	Ditto ditto ..	Guma	15,776	25	....	.....	15,776	25	
			Total	400,009	625	....	.....	400,009	625	
Kámrúp ..	Kulsi	Kámrúp district	Barduar.....	15,896	25	....	.....	15,896	25	
Ditto ..	Ditto ...	Ditto ditto	Pantan	21,910	34	....	.....	21,910	34	
Ditto ..	Ditto	Ditto ditto	Kulsi plantation..	3,680	6	....	.....	3,680	6	
Ditto ..	Ditto	Ditto ditto	Milmilia	3,610	6	....	.....	3,610	6	
Ditto ..	Ditto	Ditto ditto	Mayang	4,800	7	....	.....	4,800	7	
Ditto ..	Ditto	Ditto ditto ...	Chhaygaon	2,705	4	....	.....	2,705	4	
Ditto ..	Jirang	Ditto ditto	Matalkhar	2,240	4	....	.....	2,240	4	
Ditto ..	Rani	Ditto ditto	Jara.....	1,037	2	....	.....	1,037	2	
Ditto ..	Ditto	*Ditto ditto	Rani	11,035	17	....	.....	11,035	17	
Ditto ..	Ditto	Ditto ditto	Kawasing	3,570	6	....	.....	3,570	6	
Ditto ..	Singra	Ditto ditto	Simla Hills	317	....	....	.....	317	....	
Ditto ..	Ditto	Ditto ditto	Dumpara	497	1	....	.....	497	1	
Ditto ..	Ditto	Ditto ditto . ..	Khaksi, Sikrabura Hill.	2,530	4	....	.....	2,530	4	
Ditto ..	Ditto	Ditto ditto	Ghoraputa	120	....	....	.....	120	....	
Ditto .	Ditto	Ditto ditto	Khatkhati Hills..	644	1	....	.....	644	1	
Ditto ..	Ditto	Ditto ditto	Taraibari	806	1	....	.....	806	1	
Ditto ..	Ditto	Ditto ditto	Garubaldha	240	....	....	.....	240	....	
Ditto ..	Ditto	Ditto ditto	Khurkhuri	149	....	....	.....	149	....	
Ditto ..	Ditto	Ditto ditto	Sursuria Hills....	970	2	....	.....	970	2	
Ditto ..	Ditto	Ditto ditto	Gizang	930	1	....	.....	930	1	
Ditto ..	Ditto	Ditto ditto	Jaipur	774	1	....	.....	774	1	
Ditto ..	Ditto	Ditto ditto	Baradobha	1,190	2	....	.....	1,190	2	
Ditto ..	Ditto	Ditto ditto	Nampathar	640	1	....	.....	640	1	
Ditto ..	Ditto	Ditto ditto	Borjuli	1,120	2	....	.....	1,120	2	
Ditto ..	Northern	Ditto ditto	Hajo	243	....	....	.....	243	....	
			Total	81,653	128	....	.....	81,653	128	
Darrang ..	Western	Darrang District....	Khalingdnar	13,212	21	....	.....	13,212	21	
Ditto ..	Central	Ditto ditto ...	Ballpara.....	56,224	88	....	.....	56,224	88	
Ditto ..	Ditto	Ditto ditto	Charduar	67,004	105	....	21	66,983	105	No. 34, dated the 20th August 1889.
Ditto ..	Ditto	Ditto ditto	Bhamaraguri	386	1	....	.....	386	1	
Ditto ..	Ditto	Ditto ditto	Garumari	205	....	....	.....	205	....	
Ditto ..	Ditto	Ditto ditto	Singri Hill	1,200	2	....	.....	1,200	2	
Ditto ..	Eastern	Ditto ditto	Nowduar	52,480	82	....	.....	52,480	82	
			Total.....	190,711	298	....	21	190,690	298	
Nowgong..	Western	Nowgong district ..	Kholahat	16,848	26	....	.....	16,848	26	
Ditto ..	Eastern	Ditto ditto ..	Rongkhong	6,339	10	....	.....	6,339	10	
Ditto ..	Ditto	Ditto ditto ..	Sonaikusi	10,754	17	....	.....	10,754	17	
Ditto ..	Ditto	Ditto ditto ..	Doboka	29,014	45	....	....	29,014	45	
Ditto ..	Ditto	Ditto ditto ..	Diju.....	5,742	9	....	.....	5,742	9	
Ditto ..	Ditto	Ditto ditto ..	Suang	1,924	3	....	.....	1,924	3	
Ditto ..	Ditto	Ditto ditto ..	Ramuni	499	1	....	50*	449	1	
Ditto ..	Ditto	Ditto ditto ..	Jungthung	.....	....	8,047	.....	8,047	13	No. 39, dated the 27th September 1889.
Ditto ..	Ditto	Ditto ditto ..	Sildharampur	.....	....	4,191	.....	4,191	7	
Ditto ..	Ditto	Ditto ditto ..	Kukiakata Hill ..	.....	....	3,936	.... .	3,936	6	No. 48, dated the 23rd November 1889.
			Total.....	71,120	111	16,174	50	87,244	136	
Sibságar ..	Sibságar.....	Sibságar district	Dirol	11,733	18	....	.....	11,733	18	
Ditto ..	Ditto	Ditto ditto	Abhoipur	16,281	25	....	.....	16,281	25	
Ditto ..	Ditto	Ditto ditto	Sola	1,778	3	....	.....	1,778	3	
Ditto ..	Jorhát.....	Ditto ditto	Holangapar	4,912	8	....	.....	4,912	8	
Ditto ..	Ditto.....	Ditto ditto	Desai	6,912	11	....	.....	6,912	11	
Ditto ..	Golághát	Nága Hills ditto ...	Number	249,312	390	....	.....	249,312	390	
Ditto ..	Ditto	Ditto ditto . ..	Mikir Hills	51,840	81	....	.....	51,840	81	
Ditto ..	Ditto	Ditto ditto ...	Upper Daigurung..	5,312	8	....	.....	5,312	8	
Ditto ..	Ditto	Ditto ditto	Lower ditto ..	5,120	8	....	.....	5,120	8	

* Rectification of boundary.

FORM No. 49.—(*Concluded.*)

Division.	Range	Civil district or territory	Name of forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads	Area on 31st March 1890.		Number and date of notification of addition or transfer.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
Sibságar ..	Golaghát	Nága Hills district ..	Kalioni	51,840	81	....	.....	51,840	81	
Ditto ..	Ditto	Ditto ditto ..	Diphu	42,080	66	....	.....	42,080	66	
Ditto ..	Ditto	Ditto ditto ..	Rengma	34,400	54	....	.....	34,400	54	
Ditto ..	Ditto	Ditto ditto ..	Doyong	60,875	95	....	.....	60,875	95	
			Total.....	542,395	847	....	.....	542,395	847	
Lakhimpur	Dibrugarh	Lakhimpur district ...	Debingmukh	13,747	21	....	.....	13,747	21	
Ditto ..	Ditto	Ditto ditto .	Jokai	11,858	19	....	.....	11,858	19	
Ditto ..	North Lakhimpur	Ditto ditto ..	Bhorolowah	5,280	8	..	.....	5,280	8	
Ditto ..	Ditto	Ditto ditto ..	Kuddum.....	13,626	21	....	.....	13,626	21	
Ditto ..	Makum	Ditto ditto ..	Upper Dehing	148,691	232	....	.....	148,691	232	
Ditto ..	Ditto.....	Ditto ditto .	Jaipur	24,985	39	....	.....	24,985	39	
			Total.....	218,187	341	....	.....	218,187	341	
Khasi and Jaintia Hills.	Jowai	Khasi and Jaintia Hills.	Saipung	32,000	50	....	.....	32,000	50	
			Total.....	32,000	50	....	.....	32,000	50	
Gáro Hills..	Northern	Gáro Hills district ..	Jinari	6,640	10	....	.....	6,640	10	
Ditto ..	Ditto	Ditto ditto ..	Chima and Bangahi	8,680	14	....	.....	8,680	14	
Ditto ..	Ditto	Ditto ditto ..	Dhima	5,760	9	....	.....	5,760	9	
Ditto ..	Ditto	Ditto ditto ..	Dilma	1,120	2	....	.....	1,120	2	
Ditto ..	Ditto	Ditto ditto ..	Rajasimla	4,800	7	....	.....	4,800	7	
Ditto ..	Ditto	Ditto ditto ..	Ildek	1,280	2	....	.....	1,280	2	
Ditto ..	Ditto	Ditto ditto ..	Darugiri	2,448	4	....	.....	2,448	4	
Ditto ..	Ditto	Ditto ditto ..	Rongrengiri	8,860	14	....	.....	8,860	14	
Ditto ..	Ditto	Ditto ditto ..	Dambu	4,364	7	....	.....	4,364	7	
Ditto ..	Ditto	Ditto ditto ..	Songsak	8,005	13	....	.....	8,005	13	
Ditto ..	Southern	Ditto ditto ..	Emangiri	2,080	3	....	.....	2,080	3	
Ditto ..	Ditto	Ditto ditto ..	Rewak	1,280	2	....	.....	1,280	2	
Ditto .	Ditto	Ditto ditto ..	Siju	1,280	2	....	.....	1,280	2	
Ditto ..	Ditto	Ditto ditto ..	Bagmara	12,320	19	....	.....	12,320	19	
Ditto ..	Ditto	Ditto ditto ..	Angratoli	9,138	14	....	.....	9,138	14	
Ditto ..	Western	Ditto ditto ..	Dibru Hill..... .	6,080	9	....	.....	6,080	9	
Ditto ..	Ditto	Ditto ditto ..	Boisalgiri	640	1	....	.....	640	1	
Ditto ..	Ditto	Ditto ditto ..	Tura	480	1	....	.....	480	1	
			Total	85,255	133	....	.....	85,255	133	
			Grand Total ..	2,206,808	3,447	16,174	71	2,222,406	3,473	
			(*b*) *Protected Forests.*							
			North Cachar Hills.							
Cachar	North Cachar ..	Cachar district	Kapili Diyang	191,200	299	....	.....	191,200	299	
Ditto	Ditto ..	Ditto ditto	Diyangmati	54,080	84	....	.....	54,080	84	
Ditto	Ditto ..	Ditto ditto	Mupa Mahur	20,960	33	....	.....	20,960	33	
Ditto ...	Ditto ..	Ditto ditto	Langteng Mupa ..	58,560	92	....	.....	58,560	92	
			Total	324,800	508	....	.....	324,800	508	
Sylhet ...	Patharkandi ..	Sylhet district	Raghunandan Hills	32,593	51	....	1,667(*b*)	30,926	48	
Ditto	Ditto ..	Ditto ditto ..	Tarap Hills	37,760	59	....	.....	37,760	59	
Ditto	Ditto ..	Ditto ditto	Patijuri Hills	40,960	64	....	.....	40,960	64	
Ditto	Ditto ..	Ditto ditto	Dinarpur	4,460	7	....	.....	4,460	7	
Ditto	Ditto ..	Ditto ditto	Patharia	31,982	50	....	1,319(*c*)	30,663	48	
Ditto	Ditto . .	Ditto ditto	Dewalia.....	5,780	9	....	.....	5,780	9	
			Total	153,535	240	....	2,986	150,549	235	
Kámrúp ..	Singra	Kámrup district	Jhari Khuri.....	1,235	2	....	.....	1,235	2	
Ditto	"	Ditto ditto	Bura Gohain	620	1	....	.....	620	1	
Ditto	"	Ditto ditto	Mogakhal	180	....	....	.....	180	....	
			Total	2,035	3	....	.....	2,035	3	
Sibságar ..	Sibságar	Sibságar ditto	Panidehingia	19,200	30	....	.....	19,200	30	
			Total	19,200	30	....	.....	19,200	30	
Lakhimpur.	North Lakhimpur	Lakhimpur ditto	Kuddum	2,240	3	....	.....	2,240	3	
" ..	Dibrugarh	Ditto ditto	Parapara	26,720	42	....	.....	26,720	42	
" ..	"	Ditto ditto	Jokai	1,096	2	....	..... .	1,096	2	
" ..	Makum.....	Ditto ditto	Solaguri.....	68,122	106	.....	.....	68,122	106	
" ..	"	Ditto ditto	Upper Dehing....	1,993	3	....	.....	1,993	3	
			Total	100,171	156	....	.....	100,171	156	
			Grand Total	599,741	937	....	2,986	596,755	932	
			(*c*) *Unclassed State forests and Waste Lands.*							
Cachar	.....	Cachar district	Within revenue limits.	36,157	56	....	(*e*) 1,803	34,354	54	
Sylhet	.....	Sylhet "	Ditto ditto ..	8,000	12	....	.....	8,000	12	
Goálpára ..	.....	Goálpára "	Ditto ditto ..	33,383	52	....	.....	33,383	52	
Kámrúp .	.....	Kámrúp "	Ditto ditto ..	319,461	499	....	.....	319,461	499	
Darrang ..	.....	Darrang "	Ditto ditto ..	115,912	181	....	(*c*)202	115,710	181	
Nowgong ..	.....	Nowgong "	Ditto ditto ..	157,231	246	.. .	(*d*)16,261	140,970	220	
Sibságar ..	.....	Sibságar "	Ditto ditto ..	227,603	356	....	(*c*)2,649	224,954	352	
Lakhimpur.	.....	Lakhimpur " . ..	Ditto ditto ..	1,298,301	2,029	(*e*)5,980	12,982	1,291,299	2,018	
Cachar	.....	Cachar "	Beyond ditto ..	135,040	211	....	.....	135,040	211	
Lakhimpur.	.....	Lakhimpur "	Ditto ditto ..	929,920	1,453	....	.....	929,920	1,453	
Nága Hills	.....	Nága Hills "	Ditto ditto ..	146,423	229	....	.....	146,423	229	
Khási and Jaintia Hills.	.....	Khási and Jaintia Hills district.	Ditto ditto ..	64,000	100	....	.....	64,000	100	
Gáro Hills..	.....	Gáro Hills district ..	Ditto ditto ..	138,745	217	....	.....	138,745	217	
			Total	3,610,176	5,641	5,980	33,897	3,582,259	5,597	
			Grand Total ..	6,416,220	10,025	22,154	36,954	6,401,420	10,002	

(*b*) Given up to the Mirasdárs of Jagadishpur and Surma in consideration of their claims in the hills.
(*c*) Allotted for cultivation.
(*d*) 16,174 acres declared reserve and 87 acres allotted for cultivation
(*e*) Grants relinquished.

FORM No. 50

FOREST DEPARTMENT, ASSAM.—PROSECUTIONS FOR BREACHES OF FOREST RULES DURING 1889-90.

Forest Division and Civil District.	Cases pending from 1888-89.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
		A.—CASES TAKEN INTO COURT.												
Sylhet division—														
Sylhet district	3	...	83	...	1	84	87	79	111	4	33	83	144	4
Goálpara division—														
Goálpára district	...	2	...	...	1	3	3	2	2	1	1	3	3	...
Kámrúp division—														
Kámrúp district	...	5	...	...	1	6	6	3	25	3	3	6	28	...
Darrang division—														
Darrang district	...	...	6	...	...	6	6	3	3	3	3	6	6	...
Nowgong division—														
Nowgong district	2	1	6	...	...	7	9	6	9	3	4	9	13	...
Sibságar division—														
Sibságar district	...	...	39	9	3	51	51	29	89	12	41	41	130	10
Lakhimpur division—														
Lakhimpur district	...	...	5	...	...	5	5	4	17	1	2	5	19	...
Khási and Jaintia Hills division—														
Khási and Jaintia Hills district	...	1	...	...	...	1	1	1	1	...	...	1	1	...
Gáro Hills division—														
Gáro Hills district	1	...	...	...	...	...	1	...	...	1	1	1	1	...
Total	6	9	139	9	6	163	169	127	257	28	88	155	345	14

FORM No. 50.—(*Concluded.*)

Forest Division and Civil District.	Cases pending from 1888-89.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
B.—Cases disposed of under Section 67 of the Indian Forest Act, 1878.														
Cachar division—														
Cachar district	...	...	2	.....	21	23	23	23	25	...	...	23	25	...
Sylhet division—														
Sylhet district	...	...	68	.....	...	68	68	65	65	3	3	68	68	...
Goálpára division—														
Goálpára district	...	5	5	.....	...	10	10	10	17	...	...	10	17	...
Kámrúp division—														
Kámrúp district	...	2	31	.....	6	39	39	39	65	...	...	39	65	...
Darrang division—														
Darrang district	...	...	7	.....	...	7	7	7	7	...	...	7	7	...
Nowgong division—														
Nowgong district	...	...	41	10	...	51	51	51	55	...	...	51	55	...
Sibságar division—														
Sibságar district	...	...	20	.....	...	20	20	20	20	...	...	20	20	...
Lakhimpur division—														
Lakhimpur district	...	...	27	.....	...	27	27	27	33	...	...	27	33	...
Gáro Hills division—														
Gáro Hills district	...	...	42	.....	1	43	43	43	48	...	...	43	48	...
Total	...	7	243	10	28	288	288	285	335	3	3	288	338	...
C.—Undetected Cases. *Nil.*														
Grand Total	6	16	382	19	34	451	457	410	592	31	91	443	683	14

FORM No. 51.

FOREST DEPARTMENT, ASSAM.—AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON 1890.

Division.	Forest tracts.	Year in which protection commenced.	Area actually protected up to 15th June 1889.	During dry season of 1890. Area attempted to be protected.	Failures.	Actually protected.	Cost during the season.
	Goálpára district.						Rs.
Goálpára ...	Panbari-Pechadaveri	1875-76	3,290	2,700	2,060	640	94
	Sidli	1876-77	33,117*	38,677	6,098	32,579	1,148
	Guma	,,	15,776	14,650	6,100	8,550	1,106
	Bengtol-Darogaon ...	1886-87	7,470	7,470	6,000	1,470	136
	Bhumeswar Hill	,,	3,973	4,000	.....	4,000	232
	Maktaigaon	1887-88	3,185	2,240	.....	2,240	118
	Bijni	1888-89	87,820	99,980	11,360	88,620	517
	Chirang	1889-90	2,540	159,846	125,306	34,540	278
	Bhur	,,	.....	3,500	.....	3,500	183
	Jengasi-Charaidaka...	,,	. ..	2,690	1,410	1,280	57
	Ripu	,,	.....	41,000	41,000	.....	193
	Sankos	,,	.....	25,000	24,360	640	188
	Atiabari	,,	. ...	9,180	9,180	.....	73
	Total.....	....	157,171	410,933	232,374	178,059	4,323
	Kamrúp district.						
Kámrúp.....	Barduar	1873-74	14,400	14,400	.....	14,400	544
	Pantan	,,	16,892	19,765	.....	19,765	340
	Kulsi	,,	2,360	2,360	.....	2,360	838
	Mataikhar	,,	2,000	2,000	...	2,000	130
	Jarasal	,,	820	820	.....	820	92
	Milmillia	1874-75	2,500	2,500	.....	2,500	136
	Mayang Hill.....	1882-83	4,785	4,785	.. ...	4,785	44
	Rani { Myang Block	,,	6,000	5,991	2,000	3,991	131
	Rani { Mairakanda Block.	,,	4,400	4,400	600	3,800	145
	Kawasing	,,	2,860	3,260	.....	3,260	174
	Simla Hill.....	,,	300	300	.....	300	7
	Dumpara	,,	450	450	.....	450	7
	Khaksi Sikrabura ...	,,	2,500	2,500	.....	2,500	8
	Ghoraputa	,,	100	100	.....	100	3
	Khatkhati..... ...	,,	640	640	....	640	11
	Taraibari	,,	700	700	60	640	10
	Garubaldha...	,,	200	200	.....	200	9
	Khurkhuri	,,	140	140	.....	140	2
	Sursuria Hills	,,	900	900	.....	900	12
	Chhaygaon	1886-87	2,680	2,680	60	2,620	104
	Baradobha	1889 90	...	1,000	.....	1,000	9
	Nampathar	,,	.....	400	.....	400	8
	Barjuli	,,	... ..	1,000	.....	1,000	10
	Hajo	,,	.....	240	.....	240	29
	Jharikhuri	,,	.....	700	.....	700	17
	Buragohain	,,	.....	400	.....	400	9
	Mogakhal...	,,	.....	170	.....	170	3
	Total	.....	65,627	72,801	2,720	70,081	2,832

* 43,757 acres were shown in last year's report, of which 2,540 acres have been transferred to the Chirang reserve, and 8,100 acres, reported by Divisional Officer to be an error, have been omitted from this area.

FORM No. 51.—(*Concluded.*)

Division.	Forest tracts.	Year in which protection commenced.	Area actually protected up to 15th June 1889.	During dry season of 1890.			Cost during the season.
				Area attempted to be protected	Failures.	Actually protected.	
	Darrang district.						Rs.
Darrang	Balipara	1873-74	4,570	4,570	.....	4,570	230
	Gorumari	1874-75	180	180	.....	180	55
	Charduar	1878-79	892	892	.....	892	.....
	Bamoni Hill plantation	"	8	8	.....	8	10
	Khalingduar.....	1883-84	12,892	12,892	3,060	9,832	15
	Total	.....	18,542	18,542	3,060	15,482	310
	Nowgong district.						
Nowgong ...	Kholahat	1873-74	9,385	16,848	.....	16,848	310
	Doboka.....	"	28,290	28,640	10	28,630	209
	Diju	1879-80	5,342	5,742	.....	5,742	162
	Suung	1885-86	1,924	1,924	.....	1,924	22
	Bamuni.....	"	499	449	.....	449	22
	Sonaikusi	1888-89	4,320	10,000	590	9,410	81
	Sildharampur	1889-90	.....	3,457	.....	3,457	65
	Jungthung	"	.....	8,000	.....	8,000	50
	Kukrakata	"	.....	3,700	.....	3,700	12
	Rongkhong	"	.....	6,000	.....	6,000	108
	Total	....	49,760	84,760	600	84,160	1,041
	Khási and Jaintia Hills district.						
Khási and Jaintia Hills.	Shillong.....	1874-75	3,618	3,618	863	2,755	842
	Riatkhwan	1881-82	796	960	2	958	427
	Total	.....	4,414	4,578	865	3,713	1,269
	Gáro Hills district.						
Gáro Hills...	Dambu	1887-88	4,364	4,364	3	4,361	234
	Darugiri	"	2,448	2,448	.....	2,448	93
	Dibru Hill	1889-90	.....	6,080	37	6,043	118
	Jinari.....	"	.....	6,640	.....	6,640	219
	Chima Bangshi..... ...	"	.....	8,680	.....	8,680	359
	Dhima	"	.. ...	5,760	.....	5,760	199
	Dilma.....	"	.....	1,120	.....	1,120	130
	Rajasimla	"	... ..	4,800	.....	4,800	142
	Ildek	"	.....	1,280	.....	1,280	96
	Rongrengiri	"	.....	8,860	.....	8,860	329
	Songsak	"	...	8,005	600	7,405	269
	Emangiri	"	... .	2,080	.....	2,080	65
	Rewak	"	.....	1,280	2	1,278	44
	Siju	"	.....	1,280	.....	1,280	35
	Bolsalgiri	"	.....	640	.....	640	37
	Tura	"	.. ...	480	.....	480	9
	Bagmara	"	.....	12,320	.....	12,320	99
	Angratoli	"	.....	9,138	.....	9,138	116
	Total	.....	6,812	85,255	642	84,613	2,593
	Grand Total	.....	302,326	676,869	240,761	436,108	12,368

FORM No. 52.

FOREST DEPARTMENT, ASSAM.—AREA OF PLANTATIONS, 1889-90.

Division.	Name of plantation.	Area in acres. On 1st April 1889.	Added during the year.	Excluded during the year.	Area on 31st March 1890.	Receipts of the year.	Charges of the year.
Regular Plantations.	*Kulsi Plantation.*					Rs.	Rs.
Kámrúp	Caoutchouc	159	.....	.....	159	.....	258
	Teak	168	.....	.....	168	25	145
	Sisu	20	.....	.....	20	.....	39
	Khoir	.....	12	.....	12	.....	250
	Bamboo	2	.....	.....	2	.....	.....
	Add cost of nursery, &c.	.....	.....	.....	.....	.....	88
	Total	349	12	.....	361	25	780
Darrang	*Charduar Plantation.* Caoutchouc	1,106	432	.....	1,538	.....	8,971
	Bamuni Hill Plantation. Caoutchouc	8	.....	.....	8	.....	10
	Total	1,114	432	.....	1,546	.....	8,981
	Total Regular Plantations	1,463	444	.....	1,907	25	9,761
Cultural Operations.							
Nowgong	Sowings on blanks in the Doboka reserve	.....	.....	.....	.....	.....	69
Sibságar	Nambor timber plantation	148	20	.....	168	.....	458
Lakhimpur	Makai nursery in the Makum forest	.....	.....	.....	.....	.....	50
Khási and Jaintia Hills	Sowings on blanks in the Riatkhwan	.....	.....	.....	.....	.....	204
Gáro Hills	Cinchona nursery	.....	.....	.....	.....	.....	10
	Sâl Nursery in the Dambu Reserve	.....	.....	.....	.....	.....	71
	Total Cultural Operations	148	20	.....	168	.....	862
	Grand Total	1,611	464	.....	2,075	25	10,623

FORM No. 54.

FOREST DEPARTMENT, ASSAM.—OUTTURN (IN CUBIC FEET, SOLID) OF TIMBER AND FUEL DURING THE YEAR 1889-90 AND AGENCY OF EXPLOITATION.

Division	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or squared timber.					Miscellaneous					Fuel.					Total.
	Government.	Purchasers.	Free grantees	Rightholders.	Total.	Government.	Purchasers.	Free grantees.	Rightholders.	Total.	Government	Purchasers	Free grantees.	Rightholders.	Total.	Government.	Purchasers.	Free grantees	Rightholders.	Total	Government.	Purchasers	Free grantees.	Rightholders.	Total.	Outturn
I.—RESERVED FORESTS	C.ft.	C.ft	C.ft.	C.ft	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft	C.ft.
Cachar	..	324,064	....	....	324,064	....	804	....	....	804	....	1,674	....	....	1,674	....	90	.	....	90	....	2,632	...	.	2,632	329,264
Sylhet	....	24,222	....	....	24,222	....	812	....	....	812	....	272	....	....	272	....	....	.	....	....	....	3,113	....	....	3,113	28,424
Goálpára	8,424	305,833	....	....	314,317	....	11,758	10,376	....	22,134	....	....	....	...	.	..	16	..	....	16	....	4 479	69,816	....	74,294	410,761
Kámrúp	250	131,711	120	....	132,081	1,912	....	540	....	2,452	....	....	....	....	....	342	10,802	1,518	....	12,662	....	256	192,600	....	192,856	340,051
Darrang	125	20,525	....	....	20,650	....	....	....	....	....	....	....	....	....	....	...	2,320	....	...	2,320	....	64	....	....	64	23,034
Nowgong	...	1,985	5 440	....	7,425	....	....	3,028	....	3,028	.. .	....	....	....	...	....	1,022	838	....	1,860	....	6,048	30,760	....	36,808	49,121
Sibságar	...	11 970	....	....	11,970	....	1,288	....	....	1,288	....	....	....	....	...	....	199	.. .	....	199	....	1,504	....	....	1,504	14,961
Lakhimpur	.. .	33,544	167,587	....	201,131	....	....	....	....	....	....	....	....	....	.	....	....	..	....	...	....	....	....		....	201,131
Gáro Hills	....	22,562	....	....	22,562	....	....	....	....	....	....	....	....	..	..	....	....	. .	....	. .	....	....	...	...	....	22,562
Total	8,859	876,416	173,147	....	1,058,422	1,912	14,662	13,944	....	30,518	....	1,946	...	..	1,946	342	14,449	2,356	....	17,147	....	18,100	293,176	..	311 276	1,419,309
II.—PROTECTED FORESTS																										
Cachar	....	....	....	. .	....	....	....	....	....	....	....	....	....	. .	....	....	9,450	....	....	9,450	....	....	...	...	...	9,450
Sylhet	....	7,946	....	. .	7,946	....	200	18,024	....	18,224	....	122	....	....	122	....	....	....	....	....	....	2,934	502,340	....	505,274	531,566
Kámrúp	....	2,920	....	...	2,920	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2,920
Sibságar	....	810	....	. .	810	....	....	....	..	....	....	....	....	....	....	....	....	....	....	. .	....	....	....	....	....	810
Total	....	11,676	....	.. .	11,676	....	200	18,024	..	18,224	....	122	....	.. .	122	. .	9,450	....	....	9,450	....	2,934	502,340	....	505,274	544,746
III.—UNCLASSED FORESTS.																										
Cachar	....	27,882	. .	....	27,882	....	1,316	9,884	...	11,200	.. .	126	....	....	126	....	6,428	...	....	6,428	....	1,758	59,800	....	61,558	107,194
Sylhet	....	9,014	. . .	....	9,014	....	312	6,932	....	7,244	....	580	....	....	580	....	473	....	....	473	....	13,912	175,186	....	189,098	206,409
Goálpára	....	18,030	65,340	....	83,370	....	258	192	....	450	....	....	....	....	...	....	....	....	....	....	....	424	188,168	....	188,592	272,412
Kámrúp	....	48,932	14,980	....	63,912	....	....	360	....	360	....	....	....	....	.. .	....	2,896	2,688	....	5,584	....	3,328	172,200	....	175,528	245,384
Darrang	....	35 325	120,120	....	155,445	....	1,670	5,190	....	6,860	....	....	....	....	...	....	710	....	....	710	....	5,179	169,926	....	175,105	338,120
Nowgong	....	18,590	64,480	....	83,170	....	....	....	....	....	....	....	....	....	. .	....	28,707	....	....	28,707	....	32,580	177,582	....	210,162	322,039
Sibságar	....	33,150	201,000	....	234,150	....	4,316	....	....	4,316	....	. ..	....	....	....	....	8,904	300	....	9,204	....	35,372	541,382	....	576,754	824,424
Lakhimpur	....	200,037	285,690	....	485,727	....	516	504	....	1,020	....	2,464	....	....	2,464	....	3,897	930	....	4,827	....	76,312	720	...	77,032	571,079
Khasi and Jaintia Hills	....	. .	...	....	...	....	....	....	....	....	....	11	....	....	11	....	....	...	....	...	....	4,530	. .	.. .	4,530	4,541
Garo Hills	72	81,958	....	....	82,030	....	. ..	....	....	....	....	....	....	....	....	362	76,357	....	....	76,719	....	....	....	....	...	158,749
Total	72	473,018	751,610	....	1,224,700	....	8,388	23,062	....	31,450	....	3,181	....	....	3,181	362	128,372	3,918	....	132,652	....	173,395	1,484,964	.	1,658,359	3,030,342
IV.—REVENUE STATIONS.																										
Goálpára	....	18	....	....	18	....	332	....	..	332	....	....	. ..	...	. .	..	2,800	. ..	....	2,800	...	80	...		80	3,230
Total	....	18	....	....	18	....	332	...	.. .	332	....	....	....	....	...	....	2,800	....	....	2,800	....	80	. ..		80	3,230
Grand Total	8,931	1,361,128	924,757	....	2,294,816	1,912	23,582	55,030	....	80,524	...	5,249	....	....	5,249	704	155,071	6,274	....	162,049	....	194,509	2,280,480		2,474,989	5,017,627

FORM No. 55.

FOREST DEPARTMENT, ASSAM.—OUTTURN OF MINOR FOREST PRODUCE DURING THE YEAR 1889-90.

Division.	Description of produce.	Produce removed or utilized.									
		By Government agency.		By Purchasers.		By free grants.		By right-holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	(a) RESERVED FORESTS.		Rs.		Rs.		Rs.		Rs.		Rs.
Cachar	Bamboos (No.)	...	...	645,125	1,613	...	...	...	...	645,125	1,613
	Canes (bundles)	...	...	15,572	973	...	...	...	...	15,572	973
	Thatching-grass (cubic feet)	...	...	1,925	5	...	...	...	...	1,925	5
	Agar (baskets)	...	...	5	7	...	...	...	...	5	7
	Pathi (dals)	...	...	36,000	22	...	...	...	...	36,000	22
	Agar mahal	...	...	...	600	...	...	...	...	...	600
	Total	...	...	...	3,220	...	...	...	...	...	3,220
Sylhet	Bamboos (No.)	...	...	425,975	1,065	...	...	...	...	425,975	1,065
	Canes (bundles)	...	...	3,343	209	...	...	...	...	3,343	209
	Reeds (cubic feet)	...	...	120	4	...	...	...	...	120	4
	Thatching-grass (cubic feet)	...	...	347,362	868	...	...	...	...	347,362	868
	Pathi (dals)	...	...	63,250	40	...	...	...	...	63,250	40
	Agar mahal	...	...	...	650	...	...	...	...	...	650
	Total	...	...	...	2,836	...	...	...	...	...	2,836
Goálpára	Bamboos (No.)	...	...	...	...	135	3	...	...	135	3
	Canes (bundles)	...	...	1,225	9	1,185	9	...	...	2,410	18
	Total	...	...	...	9	...	12	...	...	...	21

FORM No. 55.—(*Continued*).

Division.	Description of produce.	Produce removed or utilized.									
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
			Rs.		Rs.		Rs.		Rs.		Rs.
Kámrúp.....	Bamboos (No.)	3,000	30	1,855	19	191,600	1,916	.....	.....	196,455	1,965
	Canes (bundles)	2,329	17	.....	.....	4,770	35	.....	.....	7,099	52
	Reeds (cubic feet)	439	14	.....	.....	.....	.....	.....	.....	439	14
	Elephant tusks (No.)	2	80	2	150	.....	...	.....	.....	4	230
	Fruits.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
	Betel-creepers (No.)	.....	.....	37	4	.....	.....	.....	.....	37	4
	Trees for rearing silkworms (No.)	.....	.....	815	75	.....	.....	.....	.....	815	75
	Total	.....	141	.....	249	.....	1,951	.....	.....	.....	2,341
Darrang.....	Bamboos (No.)	.....	.....	200	4	.....	.....	.....	.....	200	4
	Trees for rearing silkworms (No.)	.....	.....	20	2	.....	.....	.....	.....	20	2
	Total	.....	.....	.....	6	.....	.....	.....	.....	.....	6
Nowgong	Bamboos (No.)	.....	.....	23,290	402	38,000	380	.....	.....	61,290	782
	Canes (bundles).....	.....	.....	8,269	62	.....	.....	.....	.....	8,269	62
	Thatching-grass (cubic feet)	.....	.....	2,300	6	.....	.....	.....	.....	2,300	6
	Elephant tusks (No.)	2	80	.....	.....	.....	.....	.....	.....	2	80
	Total	.....	80	.....	470	.....	380	.....	.....	.....	930
Sibságar.....	Bamboos (No.)	.....	.....	1,650	16	.....	.....	.....	.....	1,650	16
	Canes (bundles)	.....	.....	6,200	46	.....	.....	.....	.....	6,200	46
	Thatching-grass (cubic feet)	.....	.....	2,250	6	.....	.....	.....	.....	2,250	6
	Bil grass (*Phrynium dichotomum*) mahál	.....	.....	...	148	.....	.....	.....	.....	.....	148
	Total	.....	.....	.....	216	.....	.....	.....	.....	.....	216

Lakhimpur.....	Bamboos (No.)	.....	.....	3,080	40	.....	.....	.....	.....	3,080	40
	Total	.....	.....	.....	40	.....	.....	.....	.....	.....	40
	Total Reserved Forests	.....	221	.....	7,046	.....	2,343	.....	.....	.....	9,610
	(*b*) PROTECTED FORESTS.										
Sylhet	Bamboos (No.)	.....	.....	586,000	1,465	1,236,700	3,092	.....	.....	1,822,700	4,557
	Canes (bundles)	.....	.....	1,661	104	18,781	1,174	.....	.....	20,442	1,278
	Reeds (cubic feet)	.....	.....	5,187	162	47,764	1,493	.....	.....	52,951	1,655
	Thatching-grass (cubic feet)	.....	.....	474,552	1,186	546,781	1,367	.....	.....	1,021,353	2,553
	Pathi (dals)	.....	.....	13,125	8	.....	.....	.....	.....	13,125	8
	Thatching-grass mahal	.....	.....	.....	511	.....	.....	.....	.....	.....	511
	Total	.....	.....	.....	3,436	.....	7,126	.....	.....	.....	10,562
Kámrúp.....	Trees for rearing lac (No.)	.....	.....	1	.....	.....	.....	.....	.....	1	.....
	Total	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Total Protected Forests ...	.....	.....	.....	3,436	.....	7,126	.....	.....	.....	10,562
	(*c*) *Unclassed State Forests and Waste Lands.*										
Cachar	Bamboos (No.)	.....	.....	315,525	812	64,400	161	.....	.....	379,925	973
	Canes (bundles)	.....	.....	2,737	171	1,539	96	.....	.....	4,276	267
	Reeds (c. ft.).....	.....	.....	447	14	4,680	146	.....	.....	5,127	160
	Thatching-grass (c. ft)	.....	.....	1,400	3	49,400	123	.....	.....	50,800	126
	Agar wood (baskets)	.....	.....	61	92	.....	.....	.....	.....	61	92
	" mahál.....	.....	.....	.....	400	.....	.....	.....	.....	.....	400
	Thatching-grass mahál	.....	.....	.....	124	.....	.....	.....	.....	.....	124
	Total.....	.....	.....	.....	1,616	.....	526	.....	.....	.....	2,142
Sylhet.....	Bamboos (No.)	.....	.....	51,709	121	337,300	843	.....	.....	389,009	964
	Grazing "	.....	.....	40	20	.....	.....	.....	.....	40	20
	Canes (bundles).....	.....	.....	1,113	70	4,537	284	.....	.....	5,650	354
	Reeds (c. ft.).....	.....	.....	466	15	12,025	376	.....	.....	12,491	391
	Thatching-grass (c. ft.)	.....	.....	277,660	694	24,945	62	.....	.....	302,605	756
	Pathi (dals)	.....	.....	9,320	6	39,000	24	.....	.....	48,320	30
	Lac.....	.....	.....	.....	2	.....	.....	.....	.....	.....	2
	Thatching-grass mahál.....	.....	.....	.....	386	.....	.....	.....	.....	.....	386
	Total.....	.....	.....	.....	1,314	.....	1,589	.....	.....	.....	2,903

FORM No. 55.—(*Continued.*)

Division.	Description of produce.	Produce removed or utilized.									
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
			Rs.		Rs.		Rs.		Rs.		Rs.
Goálpára	Bamboos (No.)	.....	.....	25	.....	.....	.....	.....	.....	25	.....
	Grazing „	.....	.....	46	12	.....	.....	.....	.....	46	12
	Canes (bundles)	...	.....	425	3	4,275	32	.....	.....	4,700	35
	Total.....	.....	.....	.....	15	.....	32	.....	.....	.....	47
Kámrúp	Bamboos (No.)	.....	.....	.....	.....	78,000	780	.....	.....	78,000	780
	Grazing „	.....	.....	135	34	.....	.....	.....	.....	135	34
	Canes (bundles)	.....	.....	.....	.....	370	3	.....	.....	370	3
	Thatching-grass (c. ft.).....	38,798	97	5,500	14	.....	.....	.....	.....	44,298	111
	Trees for rearing silkworm (No.).....	.....	.....	72	10	.....	.....	.....	.....	72	10
	Total.....	.....	97	.....	58	.....	783	.....	.....	.....	938
Darrang	Bamboos (No.)	.....	.....	213	3	21,520	215	.....	.....	21,733	218
	Canes (bundles)	.....	.....	400	3	12,840	91	.....	.....	13,240	94
	Trees for rearing lac (No.)	.....	.....	31	15	.....	.....	.....	.....	31	15
	India-rubber mahál	.....	.....	.....	21,005	.....	.....	.....	.....	.....	21,005
	Cane „	.....	.....	.....	430	.....	.....	.....	.....	.....	430
	Pipul (pepper) „	.....	.....	.....	175	.....	.....	.....	.....	.....	175
	Total.....	.....	.....	.....	21,631	.....	306	.....	.....	.....	21,937
Nowgong	Bamboos (No.)	.....	.....	5,936	60	44,950	450	.....	.....	50,886	510
	Canes (bundles)	.....	.....	64,402	483	5,055	38	.....	.....	69,457	521
	Total.....	.....	.....	.....	543	.....	488	.....	.....	.....	1,031

Sibságar	Bamboos (No.)	.....	.....	1,975	32	150,800	1,508	.....	.....	152,775	1,540
	Grazing „	.....	.....	1,463	821	.....	.....	.....	.....	1,463	821
	Canes (bundles)	.....	.....	.....	.....	22,415	168	.....	.....	22,415	168
	Reeds (c. ft.)	.....	.....	250	1	.....	.....	.....	.....	250	1
	Cane mahál	.....	.....	.....	583	.....	.....	.....	.....	.....	583
	Lac „	.....	.....	.....	58	.....	.....	.....	.....	.....	58
	Total.....	.....	.....	.....	1,495	.....	1,676	.....	.....	.....	3,171
Lakhimpur.....	Bamboos (No.)	.....	.....	14,610	229	8,380	161	.....	.....	22,990	390
	Grazing „	.....	.....	256	128	.....	.....	.....	.....	256	128
	Canes (bundles).....	.....	.....	39,989	301	311	4	.....	.....	40,300	305
	Thatching-grass (c. ft.)	.....	.....	3,600	9	.....	.....	.....	.....	3,600	9
	India-rubber mahál	.....	.....	.....	10,600	.....	.....	.....	.....	.....	10,600
	Cane mahál	.....	.....	.....	1,900	.....	.....	.....	.....	.....	1,900
	Total.....	.....	.....	.....	13,167	.....	165	.....	.....	.....	13,332
Nága Hills.....	India-rubber mahál	.....	.....	.....	517	.....	.....	.....	.....	.....	517
	Total.....	.....	.....	.....	517	.....	.....	.....	.....	.....	517
Khási and Jaintia Hills.	Fodder grass (bundles)	.....	.....	1,096	69	.....	.....	.....	.....	1,096	69
	Reeds (c. ft.).....	.....	.....	24	3	.....	.....	.....	.....	24	3
	Thatching-grass (c. ft.)	.....	.....	678	42	.....	.....	.....	.....	678	42
	Fruits	.....	.....	.....	46	.....	.....	.....	.....	.....	46
	India-rubber mahál.....	.....	.....	.....	858	.....	.....	.....	.....	.....	858
	Cassia (cinnamon) „	.....	.....	.....	31	.....	.....	.....	.....	.....	31
	Total.....	.....	.....	.....	1,049	.....	.....	.....	.....	.....	1,049
Gáro Hills.....	Foreign *gurkati* permits (No.)	.....	.....	4,463	8,926	.....	.....	.....	.....	4,463	8,926
	Gáro „ „ „	.....	.....	1,888	2,478	.....	.....	.....	.....	1,888	2,478
	Grazing (No.)	.....	.....	1,917	958	.....	.....	.....	.....	1,917	958
	Canes (bundles).....	.....	.....	320	20	.....	.....	.....	.....	320	20
	India-rubber (seers)	14	20	.....	.....	.....	.....	.....	.....	14	20
	Total.....	.....	20	.....	12,382	.....	.....	.....	.....	.....	12,402
	Total Unclassed Forests	.....	117	.....	53,787	.....	5,565	.....	.....	.....	59,469

FORM No. 55.—(*Concluded.*)

Division.	Description of produce.	Produce removed or utilized.									
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	(d)—Revenue Stations.		Rs.		Rs.		Rs.		Rs.		Rs.
Goálpára	Canes (bundles)	.....	.....	14,483	109	.....	.....	.....	.....	14,483	109
	Reeds (c. ft.)	.....	.....	29,280	915	.....	.....	.....	.....	29,280	915
	Thatching-grass (c. ft.)	.....	.....	1,004,088	2,510	.....	.....	.....	.....	1,004,088	2,510
	Total	.....	.....	.....	3,534	.....	.....	.....	.....	.....	3,534
	Total Revenue Stations	.....	.....	.....	3,534	.....	.....	.....	.....	.....	3,534
	Grand Total	.....	338	.....	67,803	.....	15,034	.....	.....	.....	83,175
	ABSTRACT OF CIRCLE.										
	Foreign *gurkati* permits (No.)	.....	.....	4,463	8,926	.....	.....	.....	.....	4,463	8,926
	Gáro " " "	.....	.....	1,888	2,478	.....	.....	.....	.....	1,888	2,478
	Bamboos (No.)	3,000	30	2,077,168	5,881	2,171,785	9,509	.....	.....	4,251,953	15,420
	Grazing "	.....	.....	3,857	1,973	.....	.....	.....	.....	3,857	1,973
	Fodder grass (bundles)	.....	.....	1,096	69	.....	.....	.....	.....	1,096	69
	Canes "	2,329	17	160,139	2,563	76,078	1,934	.....	.....	238,546	4,514
	Reeds (c. ft.)	439	14	35,774	1,114	64,469	2,015	.....	.....	100,682	3,143
	Thatching-grass (c. ft.)	38,798	97	2,121,315	5,343	621,126	1,552	.....	.....	2,781,239	6,992
	Pathi (dals)	.....	.....	121,695	76	39,000	24	.....	.....	160,695	100
	India-rubber (seers)	14	20	.....	.....	.....	.....	.....	.....	14	20
	Agar (baskets)	.....	.....	66	99	.....	.....	.....	.....	66	99
	Lac	.....	.....	.....	2	.....	.....	.....	.....	.....	2
	Elephant tusks (No.)	4	160	2	150	.....	.....	.....	.....	6	310
	Fruits	.....	.....	.....	47	.....	.....	.....	.....	.....	47
	Betel creepers (No.)	.....	.....	37	4	.....	.....	.....	.....	37	4
	Trees for rearing silk-worms (No.) ...	.....	.....	907	87	.....	.....	.....	.....	907	87
	" " " lac (")	.....	.....	32	15	.....	.....	.....	.....	32	15
	India-rubber mahal	.....	.....	.....	32,980	.....	.....	.....	.....	.....	32,920
	Cane "	.....	.....	.....	2,913	.....	.....	.....	.....	.....	2,913
	Agar "	.....	.....	.....	1,650	.....	.....	.....	.....	.....	1,650
	Thatching-grass "	.....	.....	.....	1,021	.....	.....	.....	.....	.....	1,021
	Pipul (pepper) "	.....	.....	.....	175	.....	.....	.....	.....	.....	175
	Bil-grass (*Phrynium dichotomum*) "	.....	.....	.....	148	.....	.....	.....	.....	.....	148
	Lac mahál	.....	.....	.....	58	.....	.....	.....	.....	.....	58
	Cassia (Cinnamon) mahál	.....	.....	.....	31	.....	.....	.....	.....	.....	31
	Total	.....	338	.....	67,803	.....	15,034	.....	.....	.....	83,175

FORM No. 56.

FOREST DEPARTMENT, ASSAM.—ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS OR SOLD LOCALLY DURING THE YEAR 1889-90.

Particulars.	Number or quantity.	Cubic feet.	Total of each head	
			Number or quantity.	Cubic feet.
BALANCE AT COMMENCEMENT OF THE YEAR.				
CACHAR DIVISION—				
Miscellaneous drift logs	48	1,557	48	1,557
GÁRO HILLS DIVISION—				
Sleepers	5,999	7,513		
Beams	53	473		
Logs	221	5,754		
Confiscated Sâl logs	4	.....	6,277	13,740
Received from Forests in Depôts.				
Sâl logs	473	8,859		
Sam logs	2	88		
Sâl poles	224	201		
Teak poles	393	739		
Miscellaneous poles	733	972		
Dead wood	122	342		
Waif logs (Sâl)	8	177		
" (miscellaneous)	4	45		
Drift logs "	173	6,058		
" dugouts "	2	60		
Elephant tusks (No.)	4	.....		
India-rubber (Mds.)	1-38-8	.....	2,134	17,541

Particulars.	Number or quantity.	Cubic feet	Total of each head.	
			Number or quantity.	Cubic feet.
Removed by purchasers from Depôts.				
Sâl logs	456	8,484		
Drift logs (miscellaneous)	216	7,541		
" dugouts "	2	60		
Sleepers	23	41		
Elephant tusks (No.)	4	.....		
India-rubber (Mds.)	0-14-0	.....	697	16,126
Converted in Depôts.				
Sam log	1	62	1	62
Received from Forests and sold locally.				
Drift logs (Sâl)	43	430		
" (miscellaneous)	126	2,937		
Waif logs "	35	350		
Confiscated logs "	12	120	216	3,837
Used by the Department.				
Sâl logs	17	375		
Sleepers	35	66		
Sam planks	5	8		
" scantlings	30	30		

FORM No. 56.—(*Concluded.*)

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
Received by Conversion in Depôts.				
Sam planks	20	32		
„ scantlings	30	30		
			50	62
Received by Measurement in Depôts.				
Confiscated Sâl logs	.....	40		
			.....	40
Received from Forests and sold locally.				
Drift logs (Sâl)	43	430		
„ (Miscellaneous)	126	2,937		
Waif logs „	35	350		
Confiscated logs „	12	120		
			216	3,837
Grand Total	.....	.....	8,725	36,777

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
Sâl poles	224	201		
Teak „	393	739		
Miscellaneous poles	733	972		
Dead wood	122	342		
Waif logs (Sâl)	6	120		
			1,565	2,853
Lost by the Department.				
Sleepers	100	134		
			100	134
Balance at close of the year.				
CACHAR DIVISION—				
Drift logs (miscellaneous)	5	74		
			5	74
GÁRO HILLS DIVISION—				
Sleepers	5,841	7,272		
Beams	53	473		
Sâl logs	221	5,754		
Sam „	1	26		
„ planks	15	24		
Confiscated logs (Sâl)	4	40		
Waif „ „	2	57		
„ „ (miscellaneous)	4	45		
			6,141	13,691
DARRANG DIVISION—				
India-rubber (Mds.)	1-24-8	.....	.....	.....
Grand Total	.....	.....	8,725	36,777

FORM No. 57.

FOREST DEPARTMENT, ASSAM.—ABSTRACT SHOWING THE VALUE OF TIMBER AND OTHER PRODUCE AT SALE DEPÔTS FOR THE YEAR 1889-90.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year			Difference in value.	
	No.	C. ft.	Value.	No.	C. ft.	Value.	In favour of the year.	Against the year.
CACHAR DIVISION.			Rs.			Rs.	Rs.	Rs.
Drift logs	48	1,557	59	5	74	5	.....	54
Total	.....	.....	59	.....	.....	5	.....	54
DARRANG DIVISION.								
India-rubber (mds.)...	.....	.....	.....	1-24-8	.....	100	100	.....
Total	.....	.....	.....	.....	.....	100	100	.....
GÁRO HILLS DIVISION.								
Sâl beams	53	473	159	53	473	159	.....	.....
„ logs	221	5,754	818	221	5,754	818	.....	.....
„ sleepers	5,999	7,513	4,750	5,841	7,272	4,625	.....	125
Confiscated Sâl logs ...	4	40	4	4	40	4	.....	.....
Waif Sâl logs	.....	.....	.....	2	57	6	6	.....
„ 2nd-class logs ...	.....	.....	.....	4	45	3	3	.....
Sam log	.....	.....	.....	1	26	3	3	.....
„ planks	.....	.....	.....	15	24	26	26	.....
Total	.....	.....	5,731	.....	.....	5,644	38	125
Grand Total	.....	.....	5,790	.....	.....	5,749	138	179

Net difference against the year, Rs. 41.

FORM No. 57.

FOREST DEPARTMENT, ASSAM.—ABSTRACT SHOWING THE VALUE OF LIVE AND DEAD STOCK FOR THE YEAR 1889-90.

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
DIRECTION.		Rs.		Rs.	Rs.	Rs.
Stores, Tools and Plant.						
Surveying and other instruments	20	229	7	45	.....	184
Tools	21	33	23	68	35	.....
Office and rest-house furniture	73	1,412	62	1,091	.....	321
Tents	1	100	1	100	.....	.....
Miscellaneous	.....	584	.....	115	.....	469
Buildings.						
Out-houses	5	140	.....	.....	.....	140
Live Stock.						
Elephants	2	3,800	2	3,800	.....	.....
Total	.....	6,298	.....	5,219	35	1,114

FORM No. 57.—(*Continued.*)

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
Working Plans Division.		Rs.		Rs.	Rs.	Rs.
Stores, Tools and Plant.						
Surveying and other instruments	511	1,510	469	1,162	.....	348
Tools	230	220	158	143	.....	77
Office and rest-house furniture	16	222	18	226	4	.....
Tents	.....	.....	1	100	100	.....
Miscellaneous	.....	272	.....	311	39	.....
Live Stock.						
Elephants	3	4,600	2	3,000	.....	1,600
Bullocks	.....	.....	2	100	100	.....
Total	.....	6,824	.....	5,042	243	2,025
Cachar Division.						
Stores, Tools and Plant.						
Surveying and other instruments	13	300	13	300	.....	.....
Tools	290	558	340	600	42	.....
Office and rest-house furniture	110	1,150	124	1,170	20	.....
Tents	2	100	2	90	.....	10
Miscellaneous	.....	250	.....	240	.....	10
Buildings.						
Divisional and office bungalows, revenue stations, and inspection houses.	6	8,000	6	8,000	.....	.....
Other houses	35	1,000	35	1,000	.....	.....
Live Stock.						
Elephants	1	1,500	1	1,500	.....	.....
Total	.....	12,858	.....	12,900	62	20
Sylhet Division.						
Stores, Tools and Plant.						
Surveying and other instruments	40	153	40	153	.....	.....
Tools	30	134	60	229	95	.....
Office and rest-house furniture	47	786	55	1,012	226	.....
Miscellaneous	.....	253	.....	275	22	.....
Buildings.						
Office and rest-houses	6	510	7	640	100	.....
Other houses	16	245	19	345	100	.....
Total	.....	2,111	.....	2,654	543	.....
Goálpára Division.						
Stores, Tools and Plant.						
Surveying and other instruments	21	238	35	197	.....	41
Machinery	.....		2	500	500	.....
Tools	271	278	327	417	139	.....

FORM No. 57.—(*Continued.*)

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
		Rs.		Rs.	Rs.	Rs.
Office and rest-house furniture	70	968	74	941	.....	27
Tent	1	20	.....	.....	.....	20
Miscellaneous	.....	621	.....	705	84	.....
Buildings.						
Dhubri bungalow	1	8,000	1	8,000	.....	.....
Other houses	25	830	25	1,080	250	.....
Live Stock.						
Elephants	2	3,700	6	11,000	7,300	.....
Total	.....	14,655	...	22,840	8,273	88
KÁMRÚP DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments	41	125	40	117	.....	8
Tools	476	860	647	1,111	251	.....
Office and rest-house furniture	78	987	84	1,007	20	.....
Tent	1	15	1	15	.....	.....
Miscellaneous	.....	1,750	.....	2,033	283	.....
Buildings.						
Gauháti bungalow	1	5,658	1	5,658	.....	.....
Kulsi plantation bungalow	1	3,000	1	3,000	.....	.....
Other houses	80	1,218	78	1,200	.....	18
Live Stock.						
Elephants	4	6,200	5	8,000	1,800	.....
Bullocks	2	100	.....	.....	.....	100
Total	.....	19,913	.....	22,141	2,354	126
DARRANG DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments	72	339	72	339	.....	.....
Tools	404	555	764	1,222	667	.....
Office and rest-house furniture	146	1,056	146	1,040	.....	16
Tents	2	108	.....	.....	.....	108
Miscellaneous	.....	526	.....	532	6	.....
Buildings.						
Plantation bungalow	1	5,000	1	4,900	.....	100
Bhairabighat bungalow and inspection houses.	3	3,800	3	3,600	.....	200
Other houses	19	1,400	19	1,300	.....	100
Live Stock.						
Elephant	1	1,600	.....	.....	.....	1,600
Total	...	14,384	.....	12,933	673	2,124
NOWGONG DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments	17	129	17	129	.....	.....
Tools	225	228	228	275	47	.....
Office and rest-house furniture	35	667	37	676	9	.....
Miscellaneous	.....	250	.....	6	.....	244
Buildings.						
Inspection houses	3	400	2	150	.....	250
Other houses	14	300	16	310	10	.....
Live Stock.						
Elephants	.....	.....	1	1,800	1,800	.....
Total	.....	1,974	.....	3,346	1,866	494

FORM No 57.—(*Concluded.*)

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
		Rs.		Rs.	Rs.	Rs.
SIBSÁGAR DIVISION						
Stores, Tools and Plant.						
Surveying and other instruments	30	69	32	60	.....	9
Tools	324	180	314	170	.....	10
Office and rest-house furniture	69	898	79	966	68	.....
Tents	3	105	3	105	.....	.....
Miscellaneous	.....	479	.....	553	74	.....
Buildings.						
Sibságar bungalow	1	5,000	1	5,000	.....	.....
Golághát bungalow and inspection houses	4	4,720	5	4,820	100	.....
Other houses	24	540	26	660	120	.....
Live Stock.						
Elephant	.....	.....	1	1,200	1,200	.....
Total.....	.....	11,991	.....	13,534	1,562	19
LAKHIMPUR DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments	50	601	29	661	60	.....
Tools	134	439	134	439	.....	.....
Office and rest-house furniture	61	1,127	64	1,138	11	.....
Tents	2	95	2	95	.....	.....
Miscellaneous	.....	868	.....	920	52	.....
Buildings.						
Lakhimpur bungalow	1	8,510	1	8,510	.....	.....
Margherita bungalow	.....	.....	1	3,092	3,092	.....
Other houses	25	1,886	27	2,227	341	.....
Live Stock.						
Elephants	2	3,000	2	3,000	.....	.....
Total.....	.....	16,526	.....	20,082	3,556	.....
KHÁSI AND JAINTIA HILLS DIVISION.						
Stores, Tools and Plant.						
Tools	17	17	.....	.....	.....	17
Office and rest-house furniture	.....	.....	1	30	30	.....
Miscellaneous	.....	120	.....	120	.....	.....
Buildings.						
Small houses.....	4	330	.....	.....	.....	330
Total.....	.....	467	.....	150	30	347
GÁRO HILLS DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments	162	535	102	530	.....	5
Tools	364	200	144	150	.....	50
Office and rest-house furniture	47	1,200	46	1,195	.....	5
Miscellaneous	.....	500	.....	400	.....	100
Buildings.						
Tura bungalow.....	1	5,437	1	5,437	.....	.....
„ godown	1	1,381	1	1,881	500	.....
Inspection and other houses	2	712	3	912	200	.....
Live Stock.						
Elephants	1	1,500	1	1,500	.....	.....
Total.....	.....	11,465	.....	12,005	700	160
Grand Total.....	.....	1,19,466	.....	1,32,846	19,897	6,517

Net difference in favour of the year, Rs 13,380.

FORM No. 58.

FOREST DEPARTMENT, ASSAM.—SUMMARY OF REVENUE AND EXPENDITURE OF THE DIFFERENT DIVISIONS DURING 1889-90.

Budget Heads.	Direction.	Working Plans Division.	Cachar Division.	Sylhet Division.	Goálpára Division.	Kámrup Division.	Darrang Division.	Nowgong Division.	Sibságar Division.	Lakhimpur Division	Nága Hills Division.	Khási and Jaintia Hills Division.	Gáro Hills Division.	Total.
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P	Rs. As. P.
RECEIPTS.														
I.—Timber and other produce removed from the forests by Government agency—														
a. Timber	.....	.....	.....	.....	7,100 0 0	206 5 4	.....	.....	.....	.....	.....	.....	689 8 0	7,995 13 4
b. Firewood and charcoal	.....	.....	.....	.....	.....	8 0 0	.....	.....	.....	.....	.....	.....	.....	8 0 0
c. Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
d. Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	.....	.....	.....	.....	.....	.....	80 0 0	.....	.....	.....	.....	19 9 6	99 9 6
II.—Timber and other produce removed from the forests by consumers or purchasers	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,856 8 0	11,856 8 0
a. Timber	.....	.....	33,745 4 6	7,231 6 0	89,969 5 0	47,512 8 6	7,392 4 1	6,611 12 1	9,544 11 6	31,238 3 3	.....	60 15 9	17,713 13 5	2,51,020 4 1
b. Firewood and charcoal	.....	.....	81 7 3	312 11 9	77 13 6	56 0 0	77 6 0	510 13 0	565 2 0	1,207 0 0	.....	7 4 6	.....	2,895 10 0
c. Bamboos	.....	.....	2,451 3 6	2,651 7 9	0 8 0	62 0 10	7 4 0	461 13 0	48 12 0	229 2 6	.....	.....	.....	5,912 3 7
d. Grazing and fodder grass	.....	.....	.....	20 0 0	12 0 0	47 8 0	.....	5 12 0	821 8 0	128 0 0	.....	68 8 0	958 8 0	2,061 12 0
e Other minor produce	.....	.....	2,085 15 10	4,663 9 0	3,546 3 9	320 2 0	21,628 8 0	545 0 9	862 2 0	12,810 6 9	516 10 8	933 12 0	20 0 0	47,932 6 9
III.—Drift and waif wood and confiscated forest produce	.....	.....	486 15 0	578 5 6	32 0 0	364 4 0	50 0 0	500 3 3	324 9 0	81 11 6	.....	3 0 0	149 13 0	2,510 13 3
IV.—Revenue from forests not managed by Government—														
a. Duty on foreign timber and other forest produce	.....	.....	8,301 12 6	.....	.....	.....	.....	.....	.....	91 0 0	.....	.....	.....	8,392 12 6
b. Revenue from shared and private forests	.....	.....	.....	.....	.....	2,265 4 3	.....	.....	.....	.....	.....	1,397 0 0	3,776 14 9	7,438 3 0
V. Miscellaneous—														
a. Fines and forfeitures	.....	.....	164 8 0	8 0 0	164 0 0	302 15 0	66 0 0	251 8 6	7 0 0	83 6 0	.....	15 0 0	191 12 0	1,254 1 6
b. Refunds	35 0 0	3 9 2	6 2 6	2 0 0	.....	.....	.....	.....	39 2 9	0 2 0	.....	.....	46 2 0	132 2 5
c. Other sources	131 10 0	44 0 0	4,777 5 0	19,549 5 0	1,014 0 6	1,445 6 5	184 0 0	669 8 0	548 2 6	919 12 0	.....	45 10 0	658 11 0	29,987 6 5
Total Receipts	166 10 0	47 9 2	52,100 10 1	35,016 13 0	1,01,915 14 9	52,530 6 4	29,405 6 1	9,636 6 7	12,761 1 9	46,788 12 0	516 10 8	2,531 2 3	36,080 3 8	3,79,497 10 4
EXPENDITURE.														
A.—CONSERVANCY AND WORKS.														
I.—Timber and other produce removed from the forests by Government agency—														
a. Timber	.....	.....	.....	.....	2,912 10 9	83 12 0	.....	.....	.....	.....	.....	.....	1,260 1 5	4,256 8 2
b. Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
c. Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
d. Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	.....	.....	.....	.....	.....	55 0 0	.....	.....	.....	.....	.....	7 0 0	62 0 0
II.—Timber and other produce removed from the forests by consumers or purchasers	.....	262 0 0	299 7 11	2,745 6 6	1,520 2 0	596 9 0	165 7 11	273 2 3	96 14 10	2,937 9 2	.....	.....	2,055 4 1	10,951 15 8
III.—Drift and waif wood and confiscated forest produce	.....	.....	105 12 0	.....	.....	6 11 0	.....	7 10 0	53 3 9	.....	.....	.....	.....	173 4 9
IV.—Revenue from forests not managed by Government—														
a. Duty on foreign timber and other forest produce	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
b. Revenue from shared and private forests	.....	.....	.....	.....	.....	9 0 0	.....	.....	.....	.....	.....	.....	501 9 6	510 9 6
V.—Rent of leased forests and payments to shareholders in forests managed by Government	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
VI.—Live Stock, Stores, Tools and Plant—														
a. Purchase of cattle	.....	.....	.....	.....	.....	3,750 0 0	.....	.....	2,900 0 0	3,000 0 0	.....	.....	.....	9,650 0 0
b. Feed and keep of cattle	374 11 3	411 14 2	366 6 0	34 13 0	1,571 10 3	1,350 12 3	338 5 8	41 10 6	434 0 7	937 7 9	.....	.....	395 9 11	6,257 5 4
c. Purchase of stores, tools and plant	2,175 12 3	171 13 6	100 0 0	365 9 6	888 5 6	406 10 7	675 4 0	104 2 0	252 8 0	259 14 6	.....	30 0 0	131 6 9	5,561 6 7
VII.—Communications and buildings—														
a. Roads and bridges	.....	.....	289 7 8	.....	20 14 0	1,023 14 10	1,449 4 0	.....	474 2 9	116 3 0	.....	200 0 0	177 15 5	3,751 12 8
b. Buildings	.....	.....	1,461 9 0	1,798 14 6	3,713 10 0	1,295 1 11	666 9 3	391 4 6	1,182 9 3	3,773 13 9	.....	58 1 9	1,603 4 0	15,944 13 11
c. Other works	.....	.....	179 2 10	.....	420 2 6	.....	171 12 6	72 8 0	.....	.....	.....	.....	.....	843 9 10
VIII.—Demarcation, improvement, and extension of forests—														
a. Demarcation	.....	.....	639 9 9	190 0 0	234 8 6	280 9 11	174 6 3	388 10 0	387 1 6	1,210 5 1	.....	.....	937 9 11	4,342 12 11
b. Compensation for land and rights	.....	.....	5 3 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5 3 0
c. Surveys and working plans	14 0 0	3,422 1 2	40 0 0	.....	16,372 4 9	3 8 0	.....	50 0 0	.....	.....	.....	.....	5 10 8	19,907 8 7
d. Sowing and planting	.....	.....	.....	.....	.....	779 9 2	8,980 8 11	69 8 0	458 2 0	50 0 0	.....	204 7 6	80 12 0	10,622 15 7
e. Protection from fire	.....	.....	.....	.....	5,125 9 0	2,944 10 1	358 13 0	809 14 0	.....	.....	.....	1,105 14 1	1,679 11 11	12,024 8 1
f. Other works	825 6 0	.....	749 4 0	1,173 10 0	1,879 3 6	2,249 2 0	86 4 0	1,646 3 6	1,466 11 4	194 0 0	.....	588 5 9	955 0 6	12,413 2 7
IX.—Miscellaneous—														
a. Refunds	.....	2 5 2	28 0 0	4,127 8 0	50 0 0	50 0 0	.....	102 0 0	13 0 0	1,882 4 0	.....	.....	838 8 0	7,093 9 2
b. Law charges	704 9 0	.....	120 0 0	137 0 6	1 2 0	.....	.....	36 5 4	.....	242 4 0	.....	.....	.....	1,241 4 10
c. Other charges	213 2 6	94 11 0	195 4 8	148 10 9	354 1 3	675 11 0	166 6 0	69 2 6	156 9 6	145 2 9	.....	1 7 0	455 4 1	2,675 9 0
Total A—Conservancy and Works	4,307 9 0	4,364 13 0	4,579 2 10	11,321 8 9	35,064 4 0	15,505 9 9	13,288 1 6	4,062 0 7	7,874 15 6	14,749 0 0	.....	2,188 4 1	10,984 12 2	1,28,290 1 2

FORM No. 58.—(*Concluded.*)

FOREST DEPARTMENT, ASSAM.—SUMMARY OF REVENUE AND EXPENDITURE OF THE DIFFERENT DIVISIONS DURING 1889-90.

Budget Heads.	Direction.	Working Plans Division.	Cachar Division.	Sylhet Division.	Goálpára Division.	Kamrúp Division.	Darrang Division.	Nowgong Division.	Sibságar Division.	Lakhimpur Division.	Nága Hills Division.	Khasi and Jaintia Hills Division.	Gáro Hills Division	Total
B.—ESTABLISHMENTS.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
I.—Salaries—														
a. Conservators	16,102 14 7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16,102 14 7
b. Superior officers	.....	3,983 13 11	5,400 0 0	1,918 11 3	9,050 0 0	5,350 0 0	1,800 0 0	1,800 0 0	550 0 0	9,709 11 10	.....	.....	5,400 0 0	44,962 4 0
c. Subordinate forest and depôt establishments	1,320 0 0	240 0 0	3,601 6 10	600 0 0	3,277 14 6	3,994 13 11	2,830 12 8	1,029 8 0	3,396 8 0	3,612 5 8	.....	978 0 0	3,410 10 7	28,292 0 2
d. Office establishments	5,215 15 2	503 1 5	1,003 4 0	639 9 3	1,008 0 0	1,005 8 0	689 0 1	638 6 4	990 11 4	1,007 11 9	.....	.....	1,125 14 2	13,837 1 6
e. Deputation and special allowances	.....	—94 4 0	.....	.....	200 0 0	300 0 0	280 10 4	.....	548 5 4	.....	.....	.....	1,477 6 8	2,712 2 4
II.—Travelling allowances—														
a. Conservators	1,811 7 6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,811 7 6
b. Superior officers	.....	1,609 10 6	695 8 0	406 8 0	1,041 4 6	1,222 10 0	991 4 0	1,119 14 0	.....	1,234 13 6	.....	.....	972 5 0	9,293 13 6
c. Subordinate forest and depôt establishments	406 13 4	207 14 0	642 0 0	238 5 0	521 13 0	836 14 0	563 6 0	101 10 0	1,223 13 0	886 15 0	.....	.....	437 8 10	6,067 0 2
d. Office establishments	23 11 0	213 4 2	.....	.....	1 8 0	1 4 0	.....	.....	.....	1 4 0	.....	.....	.....	240 15 2
III.—Contingencies—														
a. Stationery	9 8 0	2 2 0	.....	2 10 0	.....	.....	.....	.....	.....	7 7 9	.....	.....	6 12 0	38 7 9
b. Carriage of tents and records	34 8 0	7 4 0	21 12 0	.....	9 8 0	.....	6 10 0	.....	.....	24 12 6	.....	.....	18 8 0	122 14 6
c. Rents, rates, and taxes	360 0 0	360 0 0	50 4 0	.....	36 0 0	99 15 8	.....	.....	38 0 0	22 3 0	.....	.....	.....	966 6 8
d. Pay of police guards	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Official postage	549 0 6	49 0 0	87 10 0	283 7 0	68 11 0	170 6 6	149 14 6	77 13 0	159 5 6	163 12 6	.....	.....	207 14 6	1,964 15 0
f. Sundries	407 13 9	107 12 3	307 3 6	124 4 3	351 15 3	254 4 0	78 12 8	43 13 0	175 8 5	165 5 5	.....	.....	427 12 0	2,444 8 6
Total B, Establishments	26,241 11 10	7,189 10 3	11,309 0 4	4,213 6 9	15,566 10 3	13,235 12 1	7,390 6 3	4,811 0 4	7,082 3 7	16,836 5 11	.....	978 0 0	13,484 11 9	1,28,838 15 4
Grand Total of Expenditure	30,519 4 10	11,554 7 3	16,388 3 2	15,534 15 6	50,630 14 3	28,741 5 10	20,678 7 9	8,873 0 11	14,957 3 1	21,585 5 11	.....	3,166 4 1	24,469 7 11	2,57,129 0 6

CALCUTTA:

The 11th June 1890.

J. BRIDGNELL,

Chief Superintendent in charge, Forest Account Branch.

FORM No. 59.

FOREST DEPARTMENT, ASSAM.—ACCOUNT CURRENT FOR THE YEAR 1889-90.

Dr.

	Rs. A P	Rs A P
To Cash Balance	.....	2,972 9 9
„ VIII Assessed Taxes— Income Tax—Deductions from salaries.	.....	1,814 2 5
„ Revenue as per Annual Summary, Form No 58	.....	3,79,497 10 4
„ Service Funds—		
Civil Fund—Ordinary Bengal ...	.... .	
„ Additional, Bengal .	.....	
Military Fund- Bengal	.....	
„ „ Madras.	. . .	
„ Orphan Fund—Bengal	. ...	
Uncovenanted Service Family Pension Fund—Bengal	856 8 0	
General Family Pension Fund	.....	
Hindu Family Annuity Fund	.....	856 8 0
„ Deposits	....	6 0 0
„ Forest Cash Remittances—Local—		
Forest cheques drawn	2,42,352 12 10	
Inter divisional Transfers	126 15 3	2,42,479 12 1
„ Advances recoverable	... .	1,07,538 1 3
„ Suspense	.....	9 8 5
„ Account Current (other Governments)—		
Remittances from Government of India	17,912 0 0	
Remittances from Government of North-West Provinces and Oudh.	1,681 4 6	
Remittances from Government of Bengal.	62 12 0	19,656 0 6
„ Inter-Departmental Transfers—		
Public Works Department, other Branches	.....	1,008 0 0
Military Department, Bengal	.....	701 9 8
Marine Ditto	..... .	2 0 0
Civil Department—		
Survey of India Department ..	193 8 0	
Mathematical Instrument Department.	279 4 0	
Miscellaneous	707 10 9	1,180 6 9
	Total	7,57,722 4 9

Cr.

	Rs As P.	Rs A. P
By expenditure as per Annual Summary, Form No 58.	....	2,57,129 0 6
„ Deposits	.....	.....
„ Forest Cash Remittances—Local		
Remittances to treasuries	3,62,855 11 2	
Inter-divisional Transfers	126 15 3	
		3,62 982 10 5
„ Advances recoverable	.....	1,09,594 11 11
„ Suspense	....	8 8 5
„ Account Current (other Governments)—		
Remittances to the Government of India	22,604 13 4	
Remittances to the Government of Bengal	20 0 0	
Remittances to the Government of Central Provinces	550 0 0	
		23,174 13 4
„ Inter-departmental Transfers—		
Public Works Department, other Branches	2,573 10 6	
Public Works Department, State Railways.	602 8 0	
		3,176 2 0
Military Department, Bengal .	... ...	2 14 6
Telegraph Department	..	4 0 0
Civil Departments		
Mathematical Instrument Department	136 0 0	
Jail Department	125 11 0	
Miscellaneous	357 9 0	
		619 4
„ Cash Balance.....	.....	1,032 3
	Total ..	7,57,722 4 9

CALCUTTA:

The 11th June 1890.

J. BRIDGNELL,

Chief Superintendent in charge, Forest Account Branch.

FORM No. 60.

FOREST DEPARTMENT, ASSAM.—STATEMENT OF OUTSTANDINGS ON ACCOUNT OF REVENUE, 1889-90.

Division.	Particulars.	Outstandings, at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realised during year.	Balance due to the department at end of year.
		Rs. As. P.	Rs. As P.	Rs. As. P.	Rs. As P.	Rs. As. P.
Direction	Price of timber and other produce.	.....	166 10 0	166 10 0	166 10 0	.....
Working Plans...	Ditto ditto ...	.....	47 9 2	47 9 2	47 9 2	.....
Cachar	Ditto ditto ...	6,145 13 0	48,128 10 6	54,274 7 6	52,100 10 1	2,173 13 5
Sylhet	Ditto ditto ...	375 8 0	34,641 5 0	35,016 13 0	35,016 13 0	.....
Goálpára	Ditto ditto ...	58,407 8 0	85,677 14 9	1,44,085 6 9	1,01,915 14 9	42,169 8 8
Kámrup	Ditto ditto ...	15,617 8 0	57,013 14 4	72,631 6 4	52,530 6 4	20,101 0 0
Darrang	Ditto ditto ...	2,233 0 0	27,172 6 1	29,405 6 1	29,405 6 1	....
Nowgong	Ditto ditto ...	.....	9,656 6 7	9,656 6 7	9,636 6 7	20 0 0
Sibságar	Ditto ditto ...	....	12,764 1 9	12,764 1 9	12,761 1 9	3 0 0
Lakhimpur	Ditto ditto ...	99 0 0	46,689 12 0	46,788 12 0	46,788 12 0	.....
Nága Hills	Ditto ditto ...	.....	516 10 8	516 10 8	516 10 8	....
Khasi and Jaintia Hills.	Ditto ditto ..	.....	2,531 2 3	2,531 2 3	2,531 2 3	... .
Gáro Hills.....	Ditto ditto ...	9,719 14 3	38,088 5 8	47,808 3 11	36,080 3 8	11,728 0 3
	Total	92,598 3 3	3,63,094 12 9	4,55,693 0 0	3,79,497 10 4	76,195 5 8

FORM No. 61.

FOREST DEPARTMENT ,ASSAM.—OUTSTANDINGS AND LIABILITIES ON ACCOUNT OF CONTRACTORS AND DISBURSERS FOR 1889-90.

Division.	Department debtor			Department creditor			Balance due	
	At commencement of year	Recoveries in cash and value of supplies and work done during the year	At close of year.	At commencement of year	Payments made during year	At close of year	To department (outstandings).	By department (liabilities)
	Rs. As. P	Rs As P	Rs As. P	Rs. As P	Rs As P	Rs As. P.	Rs. As P	Rs As P
Direction.....	....	1,020 2 9	1,020 2 9	555 0 0	915 0 0	1,470 0 0	449 13 3	.....
Working Plans	....	1,742 15 9	1,742 15 9	169 1 0	4,012 1 4	4,181 2 4	2,438 2 7	.....
Cachar	..	2,948 0 6	2,948 0 6	480 5 6	2,804 1 6	3,284 7 0	336 6 6	.....
Sylhet	....	11,098 4 3	11,098 4 3	462 8 3	10,802 10 0	11,265 2 3	166 14 0	.....
Goálpára	....	23,688 9 6	23,688 9 6	326 6 9	23,721 14 7	24,048 5 4	359 11 10	.....
Kámrúp	....	15,260 7 3	15,260 7 3	613 8 9	15,711 6 1	16,324 14 10	1,064 7 7	.....
Darrang	....	16,183 15 7	16 183 15 7	165 3 0	16,424 13 2	16,590 0 8	406 1 1	.....
Nowgong	....	2,664 15 5	2,664 15 5	562 13 9	2,550 2 6	3,113 0 3	448 0 10	.....
Sibságar	....	7,458 5 1	7,458 5 1	1,144 14 8	7,107 1 1	8,251 15 9	793 10 8	.....
Lakhimpur	170 15 8	11,766 8 2	11,937 7 10	547 9 10	11,425 0 11	11,972 10 9	98 3 11	63 1 0
Nága Hills	..	.....	.....	.....	.....	.....	.....	.....
Khási and Jaintia Hills	.	....	. . .	.....	.....	.....	.....	.....
Gáro Hills	....	13,705 13 0	13,705 13 0	533 15 1	14,118 8 9	14,652 7 10	946 10 10	.....
Total	170 15 8	1,07,538 1 3	1,07,709 0 11	5,561 7 1	1,09,592 11 11	1,15,154 3 0	7,508 3 1	63 1 0

CALCUTTA:

The 11th June 1890.

J. BRIDGNELL,

Chief Superintendent in charge, Forest Account Branch.

FORM No. 62.

FOREST DEPARTMENT, ASSAM.—FINANCIAL RESULTS OF THE YEAR 1889-90.

Division.	Timber and other produce removed from the forests by Government agency.		Other revenue.		Formation, protection, and improvement of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Direction	... .	.....	167	14,676	15,873	167	30,549
Working Plans.....	.....	.....	48	4,100	7,455	48	11,555
Cachar	487	106	51,614	6,664	9,618	52,101	16,338
Sylhet	578	.....	34,439	9,365	6,170	35,017	15,535
Goálpára	7,132	2,913	94,784	10,824	37,394	101,916	50,631
Kámrúp	519	90	52,011	9,326	19,325	52,530	28,741
Darrang.....	50	55	29,355	4,281	16,343	29,405	20,679
Nowgong	580	8	9,056	2,922	5,943	9,636	8,873
Sibságar.....	325	53	12,436	4,704	10,200	12,761	14,957
Lakhimpur	82	.....	46,707	14,675	16,910	46,789	31,585
Nága Hills	.....	.....	517	.....	.....	517	.....
Khási and Jaintia Hills	3	.....	2,528	498	2,668	2,531	3,166
Gáro Hills	839	1,267	35,241	10,725	12,478	36,080	24,470
Total	10,595	4,492	3,68,903	92,260	1,60,377	3,79,498	2,57,129

SHILLONG :

The 14th July 1890.

GUSTAV MANN,

Conservator of Forests, Assam.

Appendix I.

Register of Reserved Forests in the Province of Assam during 1889-90.

Date of entry.	Name of reserve.	Civil district and sub-division of district.	Number and date of notification sanctioning the reserve.	Area in acres.	Boundaries.	Statement of rights.	Remarks.
20th August 1889.	Second addition to the Charduar reserve.	District Darrang, Balipara mauza.	No. 34, dated the 20th August 1889.	2,842	For the southern boundary as defined in Notification No. 27, dated the 19th July 1888, substitute— "A survey line running from point A as marked on the map, a copy of which is deposited in the office of the Secretary to the Chief Commissioner, in a westerly direction, to points B, C, and D, respectively, the latter being situated on the left bank of the Deputa river." For the western boundary, as defined in the above notification, substitute— "The Deputa river from point D, as shown on the map deposited in the office of the Secretary to the Chief Commissioner, to the point where this river is crossed by the southern boundary of the present Charduar reserve."	.....	The northern and eastern boundaries of this reserve remain the same as gazetted in Notification No. 27, dated the 19th July 1888. The present alteration in the southern and western boundaries were made with a view to give up about 21·12 acres of land for the exercise of the privilege of grazing, granted to the ryots of Kacharigaon, and thereby to relieve the reserve of this burden, with effect from the 20th August 1889. The area thus excluded is a strip of land along the southern boundary of the second addition to the Charduar reserve, extending for a length of about 55 chains, due east from the left bank of the Deputa river, and is of an average width (south to north) of 5·47 chains.
27th September 1889.	Jungthung ...	District Nowgong, Duár Jungthung.	No. 39, dated the 27th Septem- 1889.	8,047	*North.*—The top of the Cheksa Range from boundary mark No. 1, above the source of the Panjuri nadi to boundary-mark No. 5 above the source of the Birber nadi *East.*—The Birber nadi from boundary-mark No. 5 to boundary-mark No. 6, where it joins the Harina river. *South and West.*—The Harina river from boundary-mark No. 6, at its junction with the Birber nadi to boundary-mark No. 7, at its junction with a small hill stream, and up the latter to boundary-mark No. 9, at its source, thence a straight line along the spur of the hill in a south-westerly direction to boundary-mark No. 10 at the source of another hill stream, and down this latter to boundary-mark No. 12 at its junction with the Panjuri nadi; thence up the latter nadi to boundary-mark No. 1 at its source.		
Ditto ...	Seel Dharampur	District Nowgong, Duár Jungthung, and mauza Nomati.	Ditto ...	4,191	*North.*—The Tunklokjuri from point A to point B, at its source, thence another small hill stream to point C at its junction with the Dikhru river, as shown on the map. *East.*—The Dikhru river from point C to point D, on its right bank as shown on the map. *South and West.*—A survey line from point D on the Dikhru river in a westerly and northerly direction to point A on the Tunklokjuri, as shown on the map.		

Appendix I.—(*Concluded.*)

Register of Reserved Forests in the Province of Assam during 1889-90.

Date of entry.	Name of reserve.	Civil district and sub-division of district.	Number and date of notification sanctioning the reserve.	Area in acres	Boundaries.	Statement of rights.	Remarks.
23rd November 1889.	Kukrakata Hill...	District Nowgong, Duár Bagri.	No. 48, dated the 23rd November 1889.	3,936	*North.*—The Kullung river from point A at the Rangalugarh to point B at its junction with the Diphlu river, thence up the latter to point C, as shown on the map. *East.*—The Diphlu river from point C to point D, where it is crossed by the Trunk Road, as shown on the map. *South and West.*—The Trunk Road from point D, where it crosses the Diphlu river, to point E, thence along the foot of the Kukrakata Hill to point F on the Trunk Road, thence along the latter to point G at the Rangalugarh ; thence to the latter to point A on the Kullung river, as shown on the map.		

Appendix II.

Statement showing the clearing of Boundary-lines and repairing of Boundary-mounds and the Inspection done by the Divisional Officer in each Forest Division in 1889-90.

Divisions.	Total length of artificial boundaries and demarcated natural boundaries.	Length of artificial boundaries and demarcated natural boundaries cleared in 1889-90.	Total number of boundary-mounds.	Number of boundary-mounds repaired in 1889-90.	Length of artificial boundaries and demarcated natural boundaries inspected by the Divisional Officer.	Average cost per running mile of boundary work in 1889-90.	Average cost per running mile of boundary work in 1888-89.
	Miles.	Miles.			Miles.	Rs. As. P.	Rs. As. P.
Cachar	73	71	690	690	58	8 15 9	10 0 7
Sylhet	9	9	.....	.....	9	20 0 0	.....
Goálpára	102	102	376	376	102	2 4 6	1 11 2
Kámrúp	380	380	1,757	1,757	345	0 11 9	0 14 4
Darrang	33	33	137	137	20	5 4 2	6 9 1
Nowgong	124	123	1,034	1,026	123	3 2 5	3 5 0
Sibságar	140	128	303	297	119	3 0 4	4 9 8
Lakhimpur	111	104	303	163	61	11 10 9	14 3 10
Gáro Hills	161	161	308	308	131	5 3 0	4 11 8
Total	1,133	1,111	4,908	4,754	968	3 14 5	3 13 7

Appendix III.

KULSI PLANTATION MEMORANDUM.

Counting and measurement of trees of the different species, details of expenditure incurred, and table showing the rainfall in 1889-90.

RUBBER PLANTATION.

EASTERN BLOCK 1873-1877.

Area 88 acres.

Number of dominant trees measured.	Average height. Feet.	Average girth. Feet.	Inches.
100	44	3	8

The measurements of the largest and finest are:—

Number.	Height. Feet.	Girth. Feet.	Inches.
1	57	3	4½
2	56	3	6
3	54	4	8
4	55	6	6
5	55	6	8½
6	54	3	9
7	56	5	6
8	55	5	1½
9	56	3	2
10	60	4	5

This block was divided into four compartments; the result of countings in each compartment is as follows:—

Number of compartment.	Number alive.	Number of vacancies.	Total.
1	420	7	427
2	735	13	748
3	864	14	878
4	448	3	451
Total	2,468	37	2,504

50 of the Tun or Poma-trees in this block were also measured, and the average size of them is given below:—

Number of dominant trees.	Average height.	Average girth.
50	40 feet.	1 foot 4 inches.

The measurements of the ten largest are—

Number.	Height. Feet.	Girth. Feet.	Inches.
1	50	2	3
2	47	1	10
3	50	2	5¼
4	45	1	9
5	52	1	9½
6	55	2	9
7	48	2	3¼
8	41	1	0¾
9	46	2	0¼
10	43	1	9½

These trees were sown in 1878.
There are 226 planted Bamboo clumps in this block. Expenditure was Rs. 37-2-3.

WESTERN BLOCK.

COMPARTMENT, 1878.

Area 13 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	60 feet.	5 feet.

The following are amongst the finest and largest trees:—

Number	Height.	Girth.	
	Feet.	Feet.	Inches.
1	64	4	10
2	61	4	10
3	61	9	10
4	64	4	11½
5	72	4	5
6	64	8	2
7	57	5	4
8	56	5	0
9	55	6	3
10	59	7	10

Number alive.	Number of vacancies.	Total.
419	5	424

In this compartment there are 131 Bamboo clumps, of which 119 are Jati, 3 Makal or Deo, and 9 Bhaluka. Expenditure was Rs. 2.

COMPARTMENT, 1883.

Area 25·45 acres.

Number of dominant trees measured.	Average height.	Average girth.	
50	35 feet.	1 foot	10 inches.

The ten largest and finest measured as follows:—

Number.	Height	Girth.	
	Feet.	Feet.	Inches.
1	40	2	11
2	44	4	0
3	41	2	9½
4	44	2	6½
5	49	3	1
6	40	3	0
7	41	2	5
8	40	3	6
9	41	3	10
10	28	1	10

Number alive.	Number of vacancies.	Total.
1,145	21	1,166

There are 380 Jati Bamboo clumps in the compartment and Ceara Rubber-trees of an average height of 33 feet and girth of 1 foot and 3 inches.

Expenditure was Rs. 39-8-6:—

COMPARTMENT 1884.

Area 33·40 acres.

Number of dominant trees measured.	Average height.	Average girth.	
		Feet.	Inches.
50	25	1	6

The measurements noted below are those of the finest in this compartment, *viz.*:—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	30	1	9
2	29	1	9
3	30	1	9
4	30	1	5
5	31	9	9¾
6	31	1	11
7	31	2	0½
8	29	1	10
9	28	1	9½
10	29	1	9¼

Number alive.	Number of vacancies.	Total.
1,814	110	1,924

There are 11 Ajhar seed-beds with an average length 290 feet, width 4 feet.
These plants are averaging 13 feet in height and 5 inches in girth.
Expenditure was Rs. 89-6-11.

COMPARTMENT, 1888.

This is fully stocked, and the plants show good growth. The compartment has been amalgamated with 1884.

TEAK PLANTATION.

COMPARTMENT, 1872.

Area 8·75 acres.

Number of dominant trees measured.	Average girth.
50	3 feet.

The following are amongst the finest and largest trees:—

Number.	Height.	Average girth.	
	Feet.	Feet.	Inches.
1	64	2	9
2	77	2	8½
3	84	3	3½
4	83	2	11½
5	78	2	8¾
6	82	3	9½
7	73	3	2
8	75	4	8
9	73	4	0
10	73	3	4½

In this compartment there are 80 *Pithecolobium Saman* trees of an average height of 48 feet and girth of 1 foot 9 inches.

Expenditure was Re. 1-14.

COMPARTMENT, 1873.

Area 33 acres.

Number of dominant trees measured.	Average girth.
50	2 feet 5½ inches.

Amongst the largest and finest are the following:—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	72	3	3½
2	64	2	8
3	72	2	5½
4	67	2	4
5	65	2	6½
6	72	2	8½
7	72	2	8½
8	67	2	9½
9	75	2	9
10	75	2	8

There are also a number of *Pithecolobium Saman* trees in this compartment of an average height of 48 feet and girth of 2 feet. Expenditure was Rs. 8-8.

COMPARTMENT, 1874.

Area 17·68 acres.

Number of dominant trees measured.	Average girth.	
	Feet.	Inches.
50	2	11

The following are amongst the best:—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	68	3	7¾
2	75	3	7
3	75	3	3
4	69	3	1
5	77	3	1¼
6	84	4	2½
7	76	3	5½
8	70	3	8
9	75	3	7¼
10	82	4	6½

Expenditure was Rs. 2-4-0.

There are also two plants of *Musa textilis.*

COMPARTMENT, 1875.

Area 60·6 acres.

Number of dominant trees measured.	Average Height.	Average girth.	
	Feet.	Feet.	Inches.
50	70	2	6

The following are the finest and largest:—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	74	3	8½
2	84	3	6
3	82	3	11
4	85	3	9½
5	81	2	6¾
6	83	3	7½
7	84	4	0
8	82	3	6¾
9	86	3	6
10	77	4	7¼

There are numerous Sam seedlings, also some Nahor and Ajhar plants. Expenditure was Rs. 19-1-6.

COMPARTMENT 1878.

Area 20·90 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	63 feet.	2 feet 3 inches.

The following ten trees measured are the best and largest:—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	73	2	7
2	67	3	10
3	65	3	3
4	70	2	5½
5	70	2	6
6	69	2	3
7	64	2	8½
8	62	2	6½
9	68	2	3
10	66	2	3

In this compartment there are also a number of Ajhar and Amari plants.

COMPARTMENT 1879.

Area 10·0 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	49 feet.	1 foot 6 inches.

The following ten trees are the largest and best:—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	49	1	8
2	47	1	11
3	53	1	8½
4	54	1	9
5	55	1	11
6	52	1	11
7	53	2	0¼
8	58	1	10
9	50	1	10
10	56	1	1½

Another fifty trees in this compartment gave the following measurements:—

Number of dominant trees measured.	Average height.	Average girth.
50	42 feet.	1 foot 8 inches.

The following measurements were taken of the finest of these:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	51	2	4½
2	56	2	8
3	44	1	7
4	41	1	4½
5	43	1	7½
6	42	1	4½
7	47	1	6
8	43	1	5½
9	40	1	3¼
10	43	1	5½

There are only three Ceara Rubber-trees left in this compartment, averaging 28 feet in height and 8 inches in girth, and also three *Pithecolobium Saman* trees of an average height of 11 feet and 4¾ inches in girth. Expenditure was 5 annas.

COMPARTMENT, 1881.

Area 20 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	45 feet.	1 foot 8½ inches.

The following are the best and largest in this compartment:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	54	1	8
2	55	2	0¾
3	53	1	8
4	51	1	8½
5	58	2	1½
6	54	1	11
7	46	1	5
8	52	2	4
9	55	2	0¼
10	55	2	1½

The following trees are also found in this compartment, *viz.*, 263 *Pithecolobium Saman* trees of an average height of 46 feet and girth 2 feet and 10 inches, which were planted along both sides of the Hathegorh and Chanchalpara district road.

The Sisu trees measured as follows:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	34	1	0½
2	38	1	2
3	24	0	9½
4	40	1	2
5	33	0	11
6	31	0	10
7	30	1	0
8	34	0	11
9	30	0	11¼
10	37	1	1½

The Ajhar-trees were also measured, and gave the following results:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	34	1	4
2	28	1	0
3	32	1	2
4	30	1	0
5	32	1	0½
6	30	0	11¾
7	32	1	4
8	35	1	1½
9	33	1	1½
10	30	0	11

There are 88 Khoir-trees, 10 of these were measured as follows:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	39	1	2
2	28	0	10¼
3	28	0	9
4	31	0	11¼
5	36	0	11
6	48	1	8
7	42	1	10½
8	48	1	6
9	27	0	7¼
10	13	0	5¾

Besides the above, there are some Sonaru (*Cassia fistula*) and Sam (*Artocarpus Chaplasha*) trees Expenditure was Rs. 1-5.

SISU PLANTATION, 1873.

Area, 20 acres.

Number of dominant trees measured.	Average height. Feet.	Average girth. Foot.	Average girth. Inches.
50	42	1	11

The following ten are the best:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	47	2	0
2	40	1	9
3	40	1	8
4	46	1	11¾
5	48	2	1
6	49	2	7¼
7	40	1	5½
8	40	1	6½
9	40	1	11½
10	40	1	7

The Tun trees in this plantation were also measured:—

Number of dominant trees measured.	Height	Girth
50	52 feet.	3 feet 2 inches.

Amongst the best are the following:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	59	3	10¼
2	55	2	8
3	57	3	0½
4	52	2	3½
5	57	2	6
6	49	2	9½
7	58	2	9½
8	52	2	5½
9	52	2	4¼
10	50	2	8½

In this compartment there are also 91 Ajhar seed-beds, average 267 feet in length and 4 feet in width.

The size of the best trees is 19 feet in height and 9½ inches in girth.

The expenditure was Rs. 19-7.

BAMBOO PLANTATION, 1882.

Area, 2 acres.

There are now 253 clumps of Bamboos of the following species, *viz.*:—

Jati	225
Jao	17
Bijuli	11
Total	253

The average number of Bamboos in each clump is 82, 18, and 11 of each kind respectively. The total number of Bamboos cut for departmental use is as follows:—

Jati	566
Jao	30
Bijuli	2
	598

There was no expenditure during the year in this compartment.

CINCHONA PLANTATION, 1885.

Compartment No. 1.

There are only 64 trees alive out of the 566 originally planted. The average height of these trees is 7 feet and girth 1¾ inches.

The size of the best one is 10 feet in height and 1¾ inches in girth.

There are also 2 Ceara Rubber-trees, averaging 30 and 31 feet in height and 11½ and 10½ inches in girth. The expenditure was Rs. 6-14-6.

JUBILEE PLANTATION.

Area 2 acres.

This is a small plot, planted with different kinds of Bamboo and Canes and Nahor-trees.

Expenditure was Rs. 4-3.

Nurseries.

The following are the results of the countings made in the different Rubber nurseries, *viz.*,—

Rubber No. 1	21
„ No. 2	300
„ No. 3	3,903
Total	4,224

MISCELLANEOUS.

Bungalow Hill.

The two Maipak-trees now measure 60 feet in height each, and have girths of 3 feet 4¼ inches.

There are also 11 *Pithecolobium Saman* trees of an average height of 50 feet and girth of 3 feet 6¾ inches, and Ceara Rubber-trees, of which the best one is of 60 feet height and 5 feet 5 inches girth. Of the *Castilloa Elastica* plants, now only one is left alive.

There are 54 *Pithecolobium Saman* at Rajapara, averaging 7 feet a height and 2 feet 7 inches in girth.

There are 52 Rubber-trees and 38 Bhaluka Bamboos planted alongside the district road.

The expenditure was Rs. 12-15.

The expenditure on plantation work at Kulsi during the year was —

		Rs.	As.	P.
1.	Rubber—			
	Old or eastern block, 88 acres	37	2	3
	New or western block, 71 „	130	15	5
2.	Teak, 168 acres	45	3	6
3.	Sisu	19	7	0
4.	Khair, new extension	201	8	0
5.	Experiments and exotics	5	3	0
6.	Cinchona	6	14	6
7.	Cost for cutting and clearing bark of the paper-mulberry.	16	13	0
8.	Arbori-*jhúm* cultivation	26	14	6
9.	Establishment	258	4	0
10.	Miscellaneous	31	4	0
	Grand total as per summary	779	9	2

Table of rainfall at Kulsi plantation:—

	1888-89. Inches.	1889-90. Inches.
April	6·8	8·6
May	14·53	10·35
June	11·92	26·6
July	22·58	11·62
August	11·39	11·58
September	6·65	12·22
October	3·50	1·58
November	0·42	0·5
December	.....	.....
January	1·86	0·45
February	1·47	.....
March	.....	0·85
Total	81·12	83·25

D. P. COPELAND,

Deputy-Conservator of Forests, Kámrúp Division.

Appendix IV.

CHARDUAR CAOUTCHOUC PLANTATION MEMORANDUM.

Measurements and Countings of Trees.

Compartments.	Between 5 and 10 feet.	Between 10 and 15 feet.	Between 15 and 20 feet.	Between 20 and 25 feet.	Between 25 and 30 feet.	Between 30 and 35 feet.	Between 35 and 40 feet.	Between 40 and 45 feet.	Between 45 and 50 feet.	Above 50 feet.	Vacancies.	Total.	Remarks.
1	...	1	20	88	256	350	308	135	51	37	3	1,249	4 washed away by the Mansiri Nadi.
2	...	18	46	146	297	329	237	100	39	44	5	1,261	
3	...	3	41	89	192	221	178	94	66	73	22	979	1 ditto ditto.
4	...	8	35	98	299	556	460	203	110	177	17	1,963	1 ditto ditto.
5	...	20	64	178	487	522	337	158	86	53	19	1,924	
6	...	10	68	178	247	273	214	91	40	7	22	1,150	
7	...	1	16	56	79	178	347	245	111	36	26	1,090	
8	...	5	21	57	181	363	191	102	79	10	21	1,080	1 ditto ditto.
9	...	7	45	134	233	280	211	76	8	...	21	1,015	
10	...	...	26	28	143	319	263	51	...	...	6	836	
11	...	16	166	328	359	331	335	78	8	...	18	1,639	
12	...	295	423	302	96	...	...	...	...	...	...	1,116	
13	...	15	68	147	200	72	...	...	...	...	5	507	
14	...	5	110	497	476	197	27	...	...	...	57	1,369	
Total April 1890	...	404	1,149	2,326	3,545	3,986	3,108	1,333	598	437	242	17,128	1,116 newly planted in Compartment 12.
„ „ 1889	17	357	1,263	3,101	4,495	3,441	1,817	706	341	415	76	16,019	
„ „ 1888	24	355	2,675	3,239	3,493	2,742	1,902	740	413	343	128	16,054	
Bamoni Hill Plantation—													
Total April 1890	3	7	14	25	33	45	134	186	196	148	3	794	
„ „ 1889	4	10	20	40	62	94	266	138	87	71	2	794	
„ „ 1888	...	22	44	56	100	174	279	107	9	3	...	794	

Height and Girths of fifty Rubber-trees measured in each year's Plantation since 1874-75.

Year when planted.	1887-88.				1888-89.				1889-90.			
	Average height in feet.		Average girth in feet.		Average height in feet.		Average girth in feet.		Average height in feet.		Average girth in feet.	
	Feet.	Inches.	Feet.	Inches.	Feet.	Inches.	Feet.	Inches.	Feet.	Inches.	Feet.	Inches.
Charduár—												
1874-75	55	10	10	8	61	11	11	5	60	0	12	2
1875-76	52	4	7	4	57	6	7	10	61	5	9	2
1876-77	52	3	6	11	55	10	7	5	61	2	8	2
1877-78	48	6	5	4	53	9	5	11	57	0	6	8
1878 79	42	2	4	1	46	2	4	6	49	5	5	9
1879-80	38	3	3	11	44	0	5	2	48	5	5	8
1880-81	32	0	3	6	38	7	4	2	43	4	4	10
Bamoni Hill—												
1874-75	42	11	3	2	47	3	10	10	55	5	12	5

Condition of Nurseries at the end of 1889-90.

Compartment No.	Area in acres.	Number of seedlings.	Height.		
			Greatest.	Average.	Least.
Old Nursery, Compartment 2	5·34	4,756	40′ 0″	16′ 7″	2′ 0″
New " " 2	·42	4,277	27′ 8″	16′ 4″	2′ 4″
Old " " 3	4·08	19,189	40′ 0″	17′ 7″	3′ 0″
New " " 3	·39	3,227	26′ 0″	14′ 0″	4′ 1″
Nursery in " 9	4·13	20,968	36′ 0″	29′ 3″	2′ 0″
" " 10	9·36	21,728	40′ 0″	23′ 10″	2′ 4″
Total	23·72	74,145			

Details of expenditure in the Charduar Caoutchouc Plantation during 1889-90, compared with the two previous years.

Particulars.	1887-88.			1888-89.			1889-90.		
	Amount.			Amount.			Amount.		
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
1. Establishment	73	1	8	86	6	6	89	8	11
2. Plantation guards	741	7	0	511	0	0	534	12	0
3. Collection, carriage, sowing and transplanting of seedlings.	88	6	0	26	5	0	20	0	0
4. Clearing lines, removing of trees and stumps, repairing of mounds, renewing stakes, and levelling paths.	2,360	8	0	1,643	5	0	1,574	12	0
5. Nurseries, fencing, weeding, drainage, &c	1	14	0	11	10	0	5	0	0
6. Pruning of trees in lines	2	0	0	.....			6	10	0
7. Planting out Rubber trees A76, B382, and C242	(A) 5	0	0	(B) 70	13	0	(C) 15	8	0
8. Miscellaneous	12	8	0	13	11	0	45	14	0
9. Cost of opening out Compartment 12	.....			316	2	0	715	2	0
10. Repairing plantation buildings	4	0	0	8	0	0	.....		
11. Cost of completing Compartment 13	165	9	0	.....			.....		
12. Ditto ditto 14	139	8	0	.....			.....		
13. Cost of opening out Compartment 15	.....			17	10	0	2,668	0	0
14. Expenditure on plantation roads	78	0	0	28	10	0	1	8	0
15. Weeding and clearing Nahor, Sam, Amari, and other young timber trees.	153	1	0	5	11	0	4	11	0
16. Cost of opening out Compartment 16	.....			.....			3,289	8	0
Total	3,774	14	8	2,684	3	6	8,970	8	11

Rainfall at the Charduar Caoutchouc Plantation for 1889-90, *compared with the last two years.*

Month.	Rainfall.		
	1887-88.	1888-89.	1889-90.
April	5·44	7·11	4·78
May	10·00	9·26	12·14
June	12·10	28·22	19·20
July	9·23	15·67	14·69
August	15·55	9·31	15·69
September	14·60	14·55	18·36
October	4·68	8·27	4·23
November	0·07	0·26	.....
December	.....	0·20	0·24
January	0·88	0·61	0 78
February	2·88	1·80	.....
March	4·15	1·91	0·44
Total	78·93	87·17	85·50

JOGESVAR SUR

Sub-Assistant-Conservator, Darrang Division.

Appendix V.

Statement of Forest Produce granted free during 1889-90.

Description of forest produce.	Cachar Division.		Sylhet Division.		Goálpára Division.		Kámrúp Division.		Darrang Division.		Nowgong Division.		Sibságar Division.		Lakhimpur Division.		Khási Hills Division.		Gáro Hills Division.	
	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs		Rs.		Rs.				
(a)—To right-holders.																				
I. Timber II. Firewood III. Minor forest produce	...	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	... ..	...	...	...	...	...
(b)—Under Concessions granted by the Local Government.																				
I.—Timber	9,884	309	24,956	1,509	65,532	4,368	18,028	1,669	125,310	12.044	65,318	6,483	201,300	20,130	454,711	26,212	...	...	...	...
Ia.—Bamboos No.	64,400	161	1,574,000	3,935	.....	...	78,000	780	21,520	215	44,950	450	150,800	1,508	8,380	161	...	...	...	...
II.—Firewood	59,800	934	677,526	10,586	188,168	1,470	172,200	2,690	169,926	2,655	177,582	2,775	541,382	8,459	720	11	...	...	...	...
III.—Minor forest produce	...	366	.....	4,780	.....	32	.. ...	3	.....	91	.....	38	.....	168	.....	4	...	...	...	...
IV.—Grass, grazing, and leaf-fodder	...	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	..	...	...	...
V.—Branches, leaves, and vegetable mould for manuring purposes.	...	...	.....	...	.....	...	.....	...	.....	...	.....	...	... ..	...	.....	...	...	...	...	...
Total	...	1,770	.....	20,810	.....	5,870	.....	5,142	.....	15,005	.....	9,746	.....	30,265	.....	26,388	...	...	...	...
(c)—By free grants under executive orders.																				
I.—Timber	...	...	.....	...	10,376	648	2,178	180	.....	...	8,468	601	.....	...	.....	...	...	...	...	...
Ia.—Bamboos (No.)	...	...	.....	...	135	3	191,600	1,916	.....	...	38,000	380	.....	...	.....	...	...	...	...	...
II.—Firewood	...	...	.....	...	69,816	545	192,600	3,009	.....	...	30,760	481	.....	...	.....	...	...	...	...	...
III —Minor forest produce	...	...	.....	...	.....	9	.....	35	.....	...	.....	...	.....	..	.....	...	...	...	...	...
IV.—Grass, grazing, and leaf-fodder	...	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	...	...	...	...
V.—Branches, leaves, and vegetable mould for manuring purposes.	..	...	.....	..	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	...	...	...	...
Total	...	...	.....	...	.....	1,205	.....	5,140	.....	...	.....	1,462	.....	...	.....	...	...	...	...	...
Grand Total	...	1,770	.....	20,810	.....	7,075	.....	10,282	.....	15,005	.....	11,208	.....	30,265	.....	26,388	...	...	...	...

Appendix VI.

Forest Produce exported from, and remaining in, the district of Cachar at the close of 1889-90.

SONAI AND SYALTEK.

Description of forest produce.	Quantity of forest produce which passed the Sonai revenue station.			Quantity of forest produce which had passed the Sonai Revenue Station and was again checked at Syaltek Revenue Station.			Amount of forest produce which remained in the district at the close of the year.		
	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total.
Logs	12,657	5,278	17,935	5,955	2,994	8,949	6,702	2,284	8,986
Agar	2½	14	16½	2½	.....	2½	2½	16½	19
Posts and planks	297	8,212	8,509	3,102	4,002	7,104	2,805	4,210	7,015
Poles	441	.....	441	35	.....	35	406	.....	406
Bamboos	752,737	31,612	784,349	518,702	28,700	547,402	234,035	2,912	236,947
Canes (bundles)	15,693	1,535	17,228	13,831	1,148½	14,979½	1,862	387	2,249
Sun-grass and reeds (cubic feet)	14,925	1,917,117	1,932,042	150	2,188,229	2,188,379	14,775	271,112	285,887
Firewood („)	3,370	4,331	7,701	26	.....	26	3,344	4,331	7,675
Dugouts	15	1	16	.....	.....	.....	15	1	16

MATIJURI AND SYALTEK.

Logs	697	4,440	5,137	543	3,089	3,632	154	1,351	1,505
Agar	27	14	41	18	14	32	9	.....	9
Posts and planks	.....	227	227	.....	169	169	.....	58	58
Poles	4	4	4	10	17	27	6	13	19
Bamboos	185,925	178,365	364,290	170,950	172,990	343,940	14,975	5,275	20,250
Canes (bundles)	2,776	5,828	8,604	2,519	5,385	7,904	257	443	700
Sun-grass and reeds (cubic feet)	24,773	10,145	34,918	.....	3,750	3,750	24,773	6,395	31,168
Firewood („)	128	2,129	2,257	.....	81	81	128	2,048	2,176
Dugout	.....	1	1	.....	1	1	.....	.....	.....

SILCHAR,
The 25th July 1890.

H. G. YOUNG,
Assistant-Conservator of Forests, Cachar Division.

Appendix VI.—(*Continued.*)

Statement showing the trade in Forest produce from Government, Foreign, and Private Forests in the Cachar Division in the year 1889-90.

Revenue station.	Locality.	Logs.			Boats.			Posts and planks.			Poles.			Bamboos.		Canes.		Sun-grass and reeds.		Agar.		Firewood and charcoal.		Fees.
		Number.	Cubic feet.	Amount.	Number.	Cubic feet.	Amount.	Number.	Cubic feet.	Amount.	Number.	Cubic feet.	Amount.	Number.	Amount.	Number.	Amount.	Cubic feet.	Amount.	Number of baskets.	Amount.	Cubic feet.	Amount.	
				Rs. As. P.			Rs. As. P.			Rs. As. P.			Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.	Rs. As. P.
Sonai	Government .. Reserved forests	9,042	299,524	24,052 14 0	3	90	18 0 0	295	1,674	139 8 6	197	788	24 10 0	535,000	1,337 8 0	12,849	803 1 0	14,925	12 15 0	..	.....	2,632	41 2 0	367 0 0
	Government .. Unclassed State forests	705	23,287	2,465 4 0	12	360	72 0 0	..	..	.....	201	804	25 2 0	170,000	448 0 0	2,264	141 8 0	....	.....	2½	3 12 0	520	8 2 0	99 12 0
	Total Government forests	9,747	322,811	26,518 2 0	15	450	90 0 0	295	1,674	139 8 6	398	1,592	49 12 0	705,000	1,785 8 0	15,113	944 9 0	14,925	12 15 0	2½	3 12 0	3,152	49 4 0	466 12 0
	Foreign forests	1,731	29,710	5,254 15 0	..	..	.....	18	70	5 9 0	3	12	0 6 0	34,075	85 3 0	..	.....	....	.....	..	.....	218	3 6 6	44 8 0
	Private "	5,278	93,771	.....	1	30	.....	8,212	9,733	.....	..	..	.....	31,612	.....	1,535	.....	1,917,117	.....	14	.....	4,331	.....	.....
	Total Sonai	16,756	446,292	31,773 1 0	16	480	90 0 0	8,525	11,477	145 1 6	401	1,604	50 2 0	770,687	1,870 11 6	16,648	944 9 0	1,932,042	12 15 0	16½	3 12 0	7,701	52 10 6	511 4 0
Matijuri	Government .. Reserved forests	619	24,540	1,887 6 0	..	..	.....	..	..	.....	4	16	0 8 0	110,125	275 5 0	2,723	170 3 0	23,600	14 6 0	5	7 8 0	....	.....	48 0 0
	Government .. Unclassed State forests	78	2,738	208 8 6	..	..	....	..	..	.....	..	..	.....	70,300	175 12 0	..	.....	1,773	15 2 6	22	33 0 0	128	2 0 0	24 0 0
	Total Government forests	697	27,278	2,095 14 6	..	..	.....	..	..	.....	4	16	0 8 0	180,425	451 1 0	2,723	170 3 0	24,773	29 8 6	27	40 8 0	128	2 0 0	72 0 0
	Foreign forests	..	....	.....	..	..	.....	..	..	.....	..	..	.....	5,500	13 12 0	153	9 9 0	....	.....	..	.....	....	.....	9 8 0
	Private "	4,440	103,963	.....	1	24	.....	277	504	.....	4	16	.....	178,565	.....	5,828	.....	10,145	.....	14	.....	2,129	.....	.....
	Total Matijuri	5,137	131,241	2,095 14 6	1	24	.....	277	504	.....	8	32	0 8 0	364,290	464 13 0	8,704	179 12 0	34,918	29 8 6	41	40 8 0	2,257	2 0 0	72 8 0
North Cachar	Protected forests	..	....	.....	315	9,450	1,114 0 0	..	..	.....	..	..	.....	.....	.....	..	.....	....	.....	..	.....	....	.....	1 0 0
	Total North Cachar	..	....	.....	315	9,450	1,114 0 0	..	..	.....	..	..	.....	.....	.....	..	.....	....	.....	..	.....	....	.....	1 0 0
Syaltek	Unclassed State forests	260	7,895	732 11 0	1	30	6 0 0	32	126	9 13 6	128	512	16 0 0	75,225	188 1 0	473	29 9 0	74	2 5 0	36½	54 12 0	1,110	17 5 6	57 12 0
	Total Government forests	260	7,895	732 11 0	1	30	6 0 0	32	126	9 13 6	128	512	16 0 0	75,225	188 1 0	473	29 9 0	74	2 5 0	36½	54 12 0	1,110	17 5 6	57 12 0
	Foreign forest	..	....	.....	..	..	.....	..	..	.....	..	..	.....	1,750	4 6 0	..	.....	....	.....	..	.....	....	.....	1 0 0
	Private "	500	11,945	.....	..	..	.....	277	440	.....	..	..	.....	70,524	.....	5	.....	222,975	.....	106	.....	172	.....	.....
	Total Syaltek	760	19,840	732 11 0	1	30	6 0 0	309	566	9 13 6	128	512	16 0 0	147,499	192 7 0	478	29 9 0	224,049	2 5 0	142½	54 12 0	1,282	17 5 6	58 12 0
	Grand total	22,653	597,373	34,601 10 6	335	9,984	1,210 0 0	9,141	12,547	154 15 0	537	2,148	66 10 0	1,282,476	2,527 15 0	25,880	1,153 14 0	2,191,009	44 12 6	200	99 0 0	11,240	72 0 0	643 8 0
	Add stock and value from previous year	1,681	42,877	5,314 1 3	3	180	18 0 0	122	591	46 2 9	120	480	15 0 0	23,124	62 7 6	530	36 4 0	....	.....	..	.....	1,460	22 13 3	45 8 0
	Total	24,334	640,250	39 915 11 9	336	10,164	1,228 0 0	9,233	13,138	201 1 9	657	2,628	81 10 0	1,305,600	2,590 6 6	26,410	1,190 2 0	2,191,009	44 12 6	200	99 0 0	12,700	94 13 3	689 0 0
	Deduct stock and value at the close of 1889-90.	455	13,920	1,554 1 9	1	30	6 0 0	88	352	27 8 0	72	288	9 0 0	6,150	38 6 0	..	.....	....	.....	..	.....	1,288	20 2 0	15 0 0
	Net result	23,879	626,330	58,361 10 0	335	10,134	1,222 0 0	9,145	12,786	173 9 9	585	2,340	72 10 0	1,299,450	2,552 0 6	26,410	1,190 2 0	2,191,009	44 12 6	200	99 0 0	11,412	74 11 3	671 0 0
	From Government Forests	10,864	364,983	30,250 3 0	333	10,080	1,222 0 0	351	1,999	164 14 9	578	2,312	72 4 0	977,624	2,448 11 6	18,889	1,180 9 0	39,772	44 12 6	66	99 0 0	4,562	71 4 9	613 0 0
	" Foreign "	2,797	51,668	8,111 7 0	..	..	.....	28	110	8 11 0	3	12	0 6 0	41,325	103 5 0	153	9 9 0	....	.....	..	.....	218	3 6 6	58 0 0
	" Private "	10,218	209,679	.....	2	54	.....	8,766	10,677	.....	4	16	.....	280,501	.....	7,368	.....	2,151,237	.....	134	.....	6,632	.....	.....

SILCHAR :
The 25th July 1890.

H. G. YOUNG,
Assistant-Conservator of Forests, Cachar Division.

Appendix VI.—(*Continued.*)

Statement showing the Increase and Decrease in Forest Produce from the Government, Foreign, and Private Forests in the Cachar Division during 1889-90, as compared with 1888-89.

Description of forest produce.	Government forests.								Foreign forests.								Private forests.			
	1888-89.			1889-90.					1888-89.			1889-90.								
	Royalty paid.	Royalty outstanding.	Total.	Royalty paid.	Royalty outstanding.	Total.	Increase.	Decrease.	Duty paid.	Duty outstanding.	Total.	Duty paid.	Duty outstanding.	Total.	Increase.	Decrease.	1888-89.	1889-90.	Increase.	Decrease.
Logs	7,622	570	8,192	10,864	410	11,274	3,082	.....	1,994	1,111	3,105	2,797	45	2,842	...	263	6,799	10,218	3,419	.....
Agar	53	...	53	66	.....	66	13	.....	.....	...	.....	.....	...	.....	...	.....	53	134	81	.....
Posts and planks	145	94	239	301	78	379	140	.....	624	38	662	28	10	38	...	624	4,443	8,766	4,323	.....
Bamboos	944,760	27,437	972,197	977,624	5,400	983,024	10,827	.....	186,100	750	186,850	41,325	750	42,075	...	144,775	432,400	280,501	...	151,899
Canes	21,828	580	22,408	18,889	.....	18,889	.....	3,519	1,415	...	1,415	153	...	153	...	1,262	7,840	7,368	...	472
Sun-grass and reeds	1,838	...	1,838	57,772	.....	57,772	55,934	.....	.....	...	.....	.....	...	.....	...	.....	2,849,950	2,133,237	...	716,713
Firewood	7,590	710	8,300	4,562	1,228	5,790	.....	2,510	24	20	44	218	60	278	234	.....	12,897	6,632	...	6,265
Charcoal	2,601	...	2,601	.....	.....	.....	.....	2,601	.....	...	.....	.....	...	.....	...	.....	1,530	.....	...	1,530
Dugouts	22	3	25	333	1	334	309	.....	.....	...	.....	.....	...	.....	...	.....	2	2	...	.....
Poles	347	54	401	578	72	650	249	.....	39	66	105	3	...	3	...	102	41	4	...	37

DATED CACHAR :

The 25th July 1890.

H. G. YOUNG,

Assistant-Conservator, Cachar Division

Appendix VI.—(*Continued.*)

FOREST PRODUCE PASSED AT PATHARKÁNDI, KANAIRGHAT, SOUTH SYLHET, AND HABIGANJ, DURING EACH MONTH 1889-90.

Month.	Patharkandi.											Kanairghat.										
	Logs.	Agar.	Posts and planks.	Bamboos.	Canes.	Sun grass and reeds.	Poles.	Pathi.	Firewood.	Dugouts	Amount realised	Logs.	Agar.	Posts and planks.	Bamboos.	Canes	Sun grass and reeds.	Poles.	Pathi.	Firewood.	Dugouts.	Amount realised.
											Rs. As. P.											Rs. As. P.
April	58	...	...	20,450	1,279	4,706	20	13,500	1,234	...	354 11 3	51	...	...	3,733	144	105	3	300	794	...	136 7 9
May	118	...	38	56,225	534	8,495	..	5,600	66	...	589 9 0	51	...	...	1,124	228	50	...	475	960	...	160 4 3
June	448	110	28	104,150	586	25,161	20	3,800	...	...	1,768 3 0	17	...	...	950	200	40	32	540	...	1	71 12 6
July	105	...	28	60 825	195	.....	48	2.625	386	...	482 7 3	87	...	24	3 351	114	130	...	5.230	448	20	318 8 9
August	66	...	34	115,675	181	25,600	26	9,000	25	...	732 3 6	10	...	37	7,612	226	1	...	1,635	1,100	8	110 5 6
September	133	65	38	31,725	204	25,722	23	...	32	...	833 3 0	24	...	8	800	107	95	6	140	...	1	82 0 0
October	139	...	17	205,025	417	65,817	98	15,000	18	...	866 6 0	10	...	7	400	40	53	...	...	136	4	29 3 3
November	106	...	...	70 700	340	62,878	5	16,350	5	...	775 6 0	2	...	2	.....	...	..	...	...	...	1	5 2 3
December	21	...	...	3,545	233	6,606	2	...	3	...	84 15 6	10	...	16	.....	6	32	17	1,000	216	8	55 7 0
January	84	...	...	38,205	64	114,600	11	13,000	...	..	660 6 0	4	...	2	.....	...	...	10	...	320	2	33 3 0
February	37	100	12	31,325	849	109,084	...	8,200	72	...	690 6 0	4	...	10	2 000	4	...	2	...	480	4	22 8 6
March	68	...	...	34,200	122	152,652	...	2.300	79	...	730 4 9	7	...	5	4,000	14	...	8	...	510	3	56 14 6
Total	1,383	275	195	772,450	5,004	601,521	258	76,375	1,920	...	8,548 1 3	277	....	111	23,970	1,113	508	78	9,320	4,970	52	1,081 13 3

Month.	South Sylhet.											Habiganj.										
	Logs.	Agar.	Posts and planks.	Bamboos.	Canes.	Sun-grass and reeds.	Poles.	Pathi.	Firewood.	Dugouts.	Amount realised.	Logs.	Agar.	Posts and planks.	Bamboos.	Canes.	Sun-grass and reeds.	Poles.	Pathi.	Firewood	Dugouts.	Amount realised.
											Rs. As. P.											Rs As. P.
April	19	...	...	.....	...	7,600	...	...	64	...	28 3 6	...	...	...	.....	...	3,100	...	...	...	...	7 12 0
May	...	...	...	.....	...	400	...	...	...	...	1 0 0	...	...	...	300	...	.....	...	...	625	...	20 10 9
June	..	...	...	.....	...	.....	...	...	...	...	... .	7	...	...	875	...	.....	...	...	...	...	6 3 0
July	7	...	7	... ..	...	.....	...	...	280	...	14 12 3	4	...	...	3,125	...	1,450	...	...	289	...	23 0 3
August	8	...	...	.....	...	.....	...	...	...	...	8 8 0	...	...	...	2,200	...	.....	...	...	88	...	7 8 0
September	10	...	40	.....	...	.....	...	...	831	...	39 7 6	...	...	...	4 000	...	.....	...	...	16	...	10 8 0
October	2	...	...	3,150	...	.....	...	...	347	...	18 5 6	...	...	...	29,350	...	.....	...	...	48	...	74 14 0
November	...	..	...	400	...	.....	...	...	464	...	15 8 0	...	...	...	39,450	...	.....	...	...	40	...	99 14 0
December	...	...	...	1,600	...	.....	...	...	...	...	4 0 0	...	...	...	16 100	...	6,000	...	...	...	...	55 4 0
January	...	...	...	14,000	...	50,125	...	...	...	...	160 5 0	...	...	...	7,800	...	76,200	...	...	...	...	209 0 3
February	14	...	...	4,389	...	128 693	...	...	...	...	376 12 9	...	...	...	119,975	...	12,200	...	...	..	...	331 3 0
March	...	...	...	4 200	...	91,500	...	...	...	...	232 8 0	...	...	...	16,250	...	126 750	...	...	...	...	357 7 0
Total	66	...	47	27,739	...	277,618	...	...	4,986	...	899 6 6	11	...	...	239,425	...	225,700	...	...	1,106	...	1,203 4 3

TARAKISOR GUPTA,

Sub-Assistant-Conservator of Forests, Sylhet Division.

Appendix VI.—(*Concluded.*)

Statement showing the Forest Produce removed from the Government, Foreign, and Private Forests in the Sylhet Division in the year 1889-90.

Revenue station.	Locality.	Logs.			Agar.		Posts and planks.			Poles.			Dugouts.			Bamboos.		Canes.		Pathi.		Sun-grass and reeds		Firewood.	
		Number.	Cubic feet.	Amount.	Maunds.	Amount.	Number.	Cubic feet.	Amount.	Number.	Cubic feet.	Amount.	Number.	Cubic feet.	Amount.	Number.	Amount.	Bundles.	Amount.	Number.	Amount.	Bundles.	Amount.	Maunds.	Amount.
				Rs. As. P.		Rs. As. P.			Rs. As. P.			Rs. As. P.			Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.
Patharkandi.	Government { Reserved	1,056	24,222	2,943 12 0	275	650 0 0	134	272	17 0 0	203	812	25 0 0	..	..	.....	425,975	1,064 15 0	3,343	209 0 0	63,250	39 8 6	347,482	872 2 6	1,549	48 11 6
	Government { Protected	327	7,877	890 13 0	..	.....	61	122	7 10 0	50	200	6 4 0	..	..	.....	346,575	866 7 0	1,661	103 13 0	13,125	8 3 3	254,039	783 9 0	361	11 4 6
	Total	1,383	32,099	3,834 9 0	275	650 0 0	195	394	24 10 0	253	1,012	31 4 0	..	..	.....	772,450	1,931 6 0	5,004	312 13 0	76,375	47 11 9	601,521	1,655 11 6	1,920	60 0 0
	Foreign	1,985	47,130	.....	20	.....	111	222	.....	4	16	.....	2	67	.....	465,850	.....	9,203	.....	2,900	.....	81,523	.....	8	.....
	Private	360	7,194	.....	..	.....	110	220	.....	2	8	.....	..	..	.....	1,066,700	.....	23	.....	150	.....	67,781	.....	80	.....
	Total	2,345	54,324	.....	20	.....	221	442	.....	6	24	.....	2	67	.....	1,532,550	.....	9,226	.....	3,050	.....	149,304	.....	88	.....
Kanaighat.	Unclassed State forests and waste land.	277	8,591	684 11 0	..	.....	111	423	31 5 0	78	312	9 12 0	52	473	49 8 6	23,970	59 14 9	1,113	69 9 6	9,320	5 13 6	508	15 14 0	4,970	155 5 0
	Foreign	..	....	.....	..	.....	..	..	.....	..	..	.....	..	..	.....	....	.....	..	.....	..	.....	....	.....	..	.....
	Private	..	....	.....	..	.....	162	423	.....	..	..	.....	..	..	.....	80	.....	..	.....	..	.....	226,002	.....	..	.....
	Total	277	8,591	684 11 0	..	.....	273	846	31 5 0	78	312	9 12 0	52	473	49 8 6	24,050	59 14 9	1,113	69 9 6	9,320	5 13 6	226,510	15 14 0	4,970	155 5 0
South Sylhet.	Unclassed State forests and waste land.	66	423	73 1 0	..	.....	47	157	9 6 0	..	..	.....	..	..	.....	27,739	61 9 0	..	.....	..	.....	277,618	692 11 6	1,986	62 11 0
	Foreign	4,084	74,571	.....	..	.....	87	115	.....	..	..	.....	..	..	.....	944,191	.....	5,839	.....	..	.....	106,000	.....	1,163	.....
	Private	405	4,692	.....	..	.....	121	483	.....	..	..	.....	..	..	.....	925,380	.....	66	.....	..	.....	47,350	.....	101	.....
	Total	4,555	79,686	73 1 0	..	.....	255	755	9 6 0	..	..	.....	..	..	.....	997,310	61 9 0	5,905	.....	..	.....	430,968	692 11 6	3,250	62 11 0
Habiganj.	Government protected forests	11	69	5 13 0	..	.....	..	..	.....	..	..	.....	..	..	.....	239,425	598 10 0	..	.....	..	.....	225,700	564 4 3	1,106	34 9 0
	Foreign	3,829	60,908	.....	..	.....	172	172	.....	..	..	.....	..	..	.....	2,759,057	.....	5,453	.....	..	.....	41,525	.....	782	.....
	Private	..	....	.....	..	.....	..	..	.....	..	..	.....	..	..	.....	....	.....	..	.....	..	.....	....	.....	..	.....
	Total	3,840	60,977	5 13 0	..	.....	172	172	.....	..	..	.....	..	..	.....	2,998,482	598 10 0	5,453	.....	..	.....	267,225	564 4 3	1,888	34 9 0
	Grand Total	11,017	203,578	763 9 0	20	.....	921	2,215	40 11 0	84	356	9 12 0	54	950	49 8 6	5,552,392	720 1 9	21,697	69 9 6	12,370	5 13 6	1,074,007	1,372 14 9	10,196	252 4 0

TARAKISOR GUPTA,
Sub-Assistant-Conservator of Forests, Sylhet Division.

A. S. Press (P. & R.) No. 107—454—20-8-90.

Resolution on the Assam Forest Report for 1889-90.

Extract from the Proceedings of the Chief Commissioner of Assam, No. 2,931R., dated the 29th August 1890.

READ—

The Report on Forest Administration in Assam during 1889-90.

RESOLUTION.

THE Chief Commissioner has read with much interest this full and satisfactory report of the working of the Provincial Forest Department during the past year. It is a record of almost uniform success and progress.

Survey and working plans (paragraphs 24-36 of report).

2. The operations of the Survey and Working Plans Division were retarded in some degree by the difficulties encountered by the forest survey party, which prevented the commencement of plane-tabling until near the end of the season, but different classes of forests were marked out, and their trees counted in sample areas over 33 square miles in extent in the Goálpára district.

Fire-protection (paragraphs 42-76 of report).

3. The season was unusually dry, and therefore unfavourable for protection from fire, but notwithstanding this and the occurrence of several large fires, some known and others supposed to be the work of incendiaries, the area successfully protected was 209 square miles more than in the previous year.

Natural and artificial reproduction (paragraphs 77-87 of report).

4. The natural reproduction of Sâl, the most valuable tree in the Assam forests, and of other trees also, is at present well ensured, and extensions have been made in the plantations of Khair, Rubber, and Ajhar, the growth in which is characterized as everything that could be desired and most vigorous.

Financial results (paragraphs 187-194 of report).

5. Finally, the department has yielded a net surplus of Rs. 1,22,369, the largest ever yet attained, which the table given at paragraph 190 of the report shows to be almost general throughout the main heads of receipt, notwithstanding an extra expenditure on the forest survey of Rs. 16,000 and an addition to the live and dead stock during the year valued at Rs. 13,339 Locally, also, the improvement is general, every division showing an increase except two (the Sibságar and Nága Hills divisions and the Khási Hills division) which have nearly always been worked at a loss, and even in these the deficit has been reduced by an increase in receipts and decrease in expenditure. The Chief Commissioner is well aware that these results could not have been attained without zeal, energy, and industry on the part of the controlling officers and the executive staff generally, and the continuous and watchful control of the Conservator; and Mr. Quinton has much pleasure in recording his high appreciation of the services of Mr. Mann and his officers in the working of this department during the past year.

6. The Chief Commissioner cannot let the present opportunity pass without referring to Mr. Mann's prolonged connection with the Forest Department in Assam which, before the report for the current year falls due, will have been severed by his retirement from Government employ. Mr. Mann was the first Forest Officer sent to Assam, and has served in the Forest Department in this Province for a period of more than 21 years. The control of the department was entrusted to him at a time when Forest Administration was quite in its infancy, and it is not too much to say that the results which have been achieved hitherto, and which are so encouraging both from an administrative and from a financial point of view, are to be mainly attributed to the assiduous and unremitting care, combined with the large technical knowledge, which have characterized his administration of the department. Mr. Mann has also not spared himself in the matter of prolonged tours (frequently in very unhealthy localities), and the extent to which year by year he has performed the duty of inspection, which is peculiarly arduous in this Province, may well be commended to other officers of Government as an example of what should be done in this respect.

By Order of the Chief Commissioner of Assam,

F. C. DAUKES,

Offg. Secretary to the Chief Commissioner of Assam.

A. S. Press (Revenue) No. 57—450+50—30-8-90.

No. 920-F., dated Simla, the 27th October 1890.

From—SIR E. C. BUCK, KT., Secretary to the Government of India, Revenue and Agricultural Department,

To—The Chief Commissioner of Assam.

I am directed to acknowledge the receipt of your letter No. 2878-R., dated the 29th August last, submitting, punctually to date, the Annual Progress Report on Forest Administration in Assam for the year 1889-90, together with your Resolution thereon.

2. The record of the year's work, except as regards fire-protection, is satisfactory. The area under Forest control underwent but slight alteration during the year. The Reserves were increased by 25 square miles, and the Protected Forests were reduced by 5 square miles excluded for cultivation, while 28 square miles of Unclassed Forests were given up for the same purpose and 9 square miles previously allotted were resumed. The area under the control of the Department at the commencement and the close of the year is exhibited in the following statement:—

Class of Forests.	At the commencement of the year. Square miles.	Added. Square miles.	Excluded. Square miles.	At the close of the year. Square miles.	Proportion of Forests to whole area of Province (45,350 square miles). Per cent.
Reserved	3,447	25	...	3,472	8
Protected	937	...	5	932	2
Unclassed	5,641	9	53	5,597	12
Total ...	10,025	34	58	10,001	22

Of the 61 square miles under forest settlement at the close of the past year, 25 square miles were notified as Reserves; the balance, 36 square miles, together with 101 square miles, which would appear to have been notified during the year as proposed Reserves, remained under settlement at the end of the year.

3. No new demarcation work appears to have been undertaken, but existing boundary lines and marks were kept in repair and nearly all were inspected during the year.

4. The survey of the valuable *sâl* forests in the Goalpara District was commenced during the year by a party of the Forest Survey Branch, assisted by one of the local Forest Officers, who was temporarily attached to it.

The special Working-Plans staff was employed in connection with this survey in marking off the different classes of forest growth, in accordance with the recommendations contained in the Inspection Report of the Inspector General of Forests, as well as in enumerating trees in sample areas. These operations were carried out with a view to the preparation of Working-Plans for the *sâl* forests, and the progress made seems to have been satisfactory.

5. A new road, 3½ miles long, was made at a cost of Rs. 411, and Rs. 3,752 represent the cost of the repairs of existing forest roads and paths. Rs. 15,945 were expended on building work, chiefly repairs.

6. The offences committed in the Assam forests are, with the exception of acts of incendiarism, usually trifling, and there was no exception to this rule during the year under review. In all, 163 cases were taken into Court and 285 cases were compounded, as compared with 92 cases prosecuted in the previous year and 390 compounded. Convictions were obtained in 82 per cent. of the cases prosecuted, as compared with 72 per cent. the year before. The diminution in the number of cases compounded was due to the power to compound having been restricted to higher officers than has hitherto been the custom in the Province.

7. The year has been marked by an exceptional failure in fire-protection such as has not occurred within the past twenty years; 36 per cent., or 376 square miles, of the area over which protection was attempted having been traversed by fires. These although partly caused by incendiaries, would appear to have been chiefly due to a too sudden extension of the area under protection

which was increased from 493 square miles in 1888-89 to 1,057 square miles during the year under review. The work of protection on such an extended scale was evidently beyond the powers of the available staff.

8. Natural reproduction in the climate of Assam is nearly always abundant, and in the evergreen forests, where the demand is small, seldom requires any assistance. The extension and reproduction of the *sâl* forests is as a rule sufficiently provided for by keeping out fires.

9. The artificial plantations of rubber, the only noticeable works of the kind in Assam, were successfully extended by 432 acres. In view of the assured importance in the future of rubber plantations to the Province and the improbability that the rubber industry can, on account of the long period required for the growth of the trees, be materially developed by private enterprise, the Government of India observe with satisfaction the progress that has been made, and trust that continued efforts may be maintained in this direction. The efforts which are being made to induce the people who practice *jhuming* to plant timber trees in their plots of cultivation were continued with praiseworthy industry, though, for the present, with poor results.

10. Injurious climbers were cut over an area of 45 square miles, at an average cost of about Rs. 25 per square mile; and some attempts, on a very small scale, were made in two divisions to improve the quality of the growing stock in the forests by inducing purchasers to cut out unsound trees. Forest weeding of this kind is important, and the Government of India are advised that it should, if possible, be carried out on a very much more extended scale, as far as the available funds will permit, at least in all forests which are being exploited.

11. The outturn of the year is tabulated as follows :—

Class of Forests.	Outturn, in Cubic Feet		Bamboos. No.	Minor Produce. Rs.
	Timber.	Fuel.		
Reserved Forests—				
By Government agency ..	11,113	.....	3,000	191
„ Purchasers	907,473	18,100	1,101,175	3,887
Free grants*	189,447	293,176	229,735	44
Total ...	1,108,033	311,276	1,333,910	4,122
Protected Forests—				
By Government agency ...	.....	.....	.....	.....
„ Purchasers	21,448	2,934	586,000	1,971
Free grants*	18,024	502,340	1,236,700	4,034
Total ...	39,472	505,274	1,822,700	6,005
Unclassed Forests—				
By Government agency ...	434	.....	.....	117
„ Purchasers	616,109	173,475	389,993	56,064
Free grants*	778,590	1,484,964	705,350	1,448
Total ...	1,395,133	1,658,439	1,095,343	57,629
Grand Total in 1889-90 ...	2,542,638	2,474,989	4,251,953	67,756
„ „ 1888-89 ...	2,142,724	3,385,319	3,500,652	57,720
Increase or decrease in 1889-90	+ 399,914	— 910,330	+ 751,301	+ 10,036

* Total value of Free grants :—

	Rs.
Timber ...	74,153
Fuel ...	33,615
Bamboos ...	9,509
Minor produce	5,526
Total ...	1,22,803

The total outturn, not including free grants, from the forests of all classes was during the year 1,751,086 cubic feet of timber and fuel, 2,080,168 bamboos, and Rs. 62,230 worth of minor produce. The free grants are roughly estimated to have included 3,266,541 cubic feet of timber and fuel, 2,171,785 bamboos, and Rs. 5,526 worth of minor produce. The total value of these grants is estimated at Rs. 1,22,803, as compared with Rs. 1,42,830 in the previous year.

Most of the outturn was, as usual, felled and removed by purchasers. Only 11,547 cubic feet of fuel and timber, 3,000 bamboos, and Rs. 308 worth of minor produce were extracted by departmental agency. Of the total yield, including the produce granted free, considerably more than one-half was felled in the Unclassed Forests, which are only nominally, and for a time, under the management of the Forest Staff.

The total outturn (not including the free grants) was greater than in the previous year. That of *sâl* timber, which is by far the most valuable produce of the forests, was 506,849 cubic feet, or 72,894 cubic feet more than during the previous year.

12. An experiment on a small scale was made in working the *sâl* forests by departmental agency, from which it is estimated that Rs. 7 more per standing tree was realized than if the trees had been sold direct to the purchasers in the manner hitherto in force. It is, however, noticed that the comparison is somewhat vitiated by the circumstance that no allowance is made for the cost of supervision by the Forest Staff, and the Government of India are of opinion that, unless contractors are forthcoming, who will do the work of extraction by contract in the manner recommended by the Inspector General of Forests in his Inspection Report on the Assam Forests, working by departmental agency is unlikely to prove specially remunerative.

13. The Conservator's remarks on the subject of the rubber trade and the importation of rubber into Assam would seem to show that better arrangements, which the revision of the Forest Act has now rendered possible, for the control of the trade are required, and the Government of India are glad to observe that proposals on the subject have been submitted by the Conservator for your consideration.

14. The financial results compare with those of the previous year as follows:—

Year.	Receipts.	Charges.	Surplus.	Proportion of Surplus to gross Revenue.
	Rs.	Rs.	Rs.	Per cent.
1889-90	3,79,498	2,57,129	1,22,369	32
1888-89	3,03,882	2,09,905	93,977	31
Increase in 1889-90 ...	75,616	47,224	28,392	1

The gross revenue and the surplus were the highest yet realized in Assam; the surplus for the previous year, which until then was the highest recorded, being only Rs. 93,977, while the *average* surplus for the ten years 1879-80 to 1888-89 amounted to Rs. 25,000. This satisfactory improvement in the financial working in recent years is, in a great measure, due to the development of the local and export trade in timber, but, in so far as it is the result of effective administration, is also creditable to the Forest Staff.

15. His Excellency the Governor General in Council endorses the high commendation which you bestow on the Conservator, Mr. Mann, whose period

of service is now drawing to a close. Mr. Mann has been connected with Forest Administration in Assam for 21 years and has been in control of the Department in that Province ever since it has formed a separate Government. The unremitting care with which Mr. Mann has performed his duties, as well as his untiring zeal and energy, have been frequently brought to notice, and the Government of India desire to place on record their sense of the loss which the Forest Department will suffer by Mr. Mann's retirement from its ranks.

Appendix showing the discrepancies noticed in the Assam Forest Administration Report for 1889-90.

(*1*) The average, per case compounded, of Rs. 8-2-5, given in paragraph 41 of the Report, should be Rs. 8-3-9, since (as 3 acquittals are shown in Form No. 50) the number of cases on which compounding amounts were realized was 285, and not 288.

(*2*) In the statement in paragraph 113, the figures entered as the outturn in cubic feet of timber and fuel, respectively, from foreign forests, Cachar, in 1888-89 are 58,853 and 16; but in the similar statement in paragraph 97 of the Report for 1888-89, the figures relating to this matter are 63,169 and 56 respectively.

(*3*) 135 boats or dugouts are shown against 1888-89 in paragraph 167, although a reference to paragraph 162 of the Report for that year gives the number as only 128.

(*4*). In the statement in paragraph 169, 80 posts and plants have been entered against 1888-89, whereas these do not appear in paragraph 164 of the Report for that year.

(*5*) Paragraph 188 shows that the value of free grants during the year amounted to Rs. 1,22,903, and comparison with 1888-89 is made accordingly; but this neither agrees with Appendix V, which yields a total of Rs. 1,22,803, nor with paragraphs 160, 165, and 166 of the Report, according to which the account stands thus :—

				Rs.
For ryots' home consumption	...	...	...	99,541
„ Dibrugarh public building	...	...	...	408
„ Assam Railways and Trading	...	...	...	22,854
		TOTAL	...	1,22,803

or, the total of Appendix V.

(*6*) In Form No. 55, under "Unclassed State Forests and Waste Lands," it is shown that minor produce to the value of Rs. 365 was removed from the Cachar Division as "Free Grants," but Appendix V gives this value at Rs. 366.

G. C. Press, Simla.—No. 814 R. & A. D.—3-11-90.—220.